

ESTABLISHED 1859.

OHIEF OFFICE: 42 CANNON STREET, LONDON, R.C.

BRANCH OFFICES: FINK'S BUILDINGS, MELBOURNE, VIO., AND
EMPIRE CHAMBERS, YORK STREET, SYDNEY, N.S.W.

▲ weekly journal, supplied from the chief office in London to subscribers and persons connected with the trade only. Subscription, 10s. per year, payable in advance, including a copy of the Diary next published, and postage to any country in the world. Single copies, 4d. each. Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank (Limited)."

As an Official Journal

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—Pharmaceutical Society of Ireland, South African Pharmaceutical Association, Midland Pharmaceutical Association of New Zealand, Orntral Association of New Zealand, Otago Pharmaceutical Association, Pharmaceutical Society of Queensland, Pharmaceutical Society of South Australia, Pharmaceutical Society of Western Australia, and Tarmanian Pharmaceutical Society.

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"GUIDE TO THE PRELIMINARY EXAMINATION." 2s. Post free, 2s. 3d.

Any wholesale drug or sundries house will supply this book at the published price. The following firms have already stocked it:—

Ayrton & Saunders, Liverpool
Barclay & Sons (Limited), London
Bleasdale, Wm., & Co., York
Duncan, Flockhart & Co., Edinburgh
Edwards, W., & Son, London
Glasgow Apothecaries' Company,

Glasgow
Hirschfeld Bros., Bream's Buildings,
Fetter Lane, E.C.

Kimpton, Henry, 82 High Holborn, W.C. Lloyd, T. Howard & Co., Leicester Maw, S., Son & Thompson, London Newbery, F., & Sons, London Potter & Clarke, London Raimes, Clark & Co., Edinburgh Raimes & Co., York Smith, T. & H., & Co., Edinburgh Thompson, John, (Limited), Liverpool Woolley, James, Sons & Co., Man-

EDUCATIONAL NUMBER.

chester

OUR annual Educational Number will be published on September 16. This issue will contain full particulars regarding education and examinations in pharmacy, medicine, science, dentistry, veterinary surgery, and agriculture, and to assist us in compiling information regarding classes, &c., we shall be glad if secretaries of schools and others will send us circulars and prospectuses of their institutions. This is a matter in which some pharmacists may be able to assist us.

The issue will be an excellent one for announcements by schools, colleges, and universities. These will be properly grouped and classified, and as the issue is one of exceptional value, being used as a guide all the year round, deans and secretaries should secure space from the publisher as early as possible.

Summary.

WE give a portrait of the late Mr William Kilner, and some particulars of his life.

WE extract from a census return some interesting particulars in regard to chemical and allied trades.

Mr. Frost reports a goodly list of subscriptions from the drug-trade to the Worthing Sick-poor Fund.

An international exhibition is to be held in Madrid next year. Particulars of it will be found on page 355.

THE Pharmaeeutical Association of British Columbia, although a small body, is vigorous. We report its annual meeting.

A WEDNESBURY solicitor, who died in July from "stoppage of the heart's action," took, it now transpires, a poisonous dose of strychnine.

A CAPE CORRESPONDENT sends us some notes in regard to pharmacy there which are specially useful for assistants who contemplate emigrating.

THERE is quite a crop of suicides by means of poison to record this week, one of the saddest being that of Dr. Stokes, a son of the late President of the Royal Society.

SEVERAL men have been charged at Bow Street with selling as Epps's an inferior cocoa put up and labelled exactly like the well-known homeopathic cocoa.

WE recently set rhymesters and others the task of criticising the supplements to our Summer Issue, and as a result we print this week several pages of amusing contributions.

THE wine-licence season is now on, and we record a few applications by chemists. Others who have experience of the Brewster Sessions this year will oblige by notifying us of the result of their applications.

"A CHEMIST AND DRUGGIST" representative has been making inquiries regarding the new drink-cure which Mr. Stead has resolved to try upon confirmed drunkards, and he reports the result in the article on "The New Drink-cure."

ANOTHER report on the influenza epidemics has been issued by the Medical Department of the Local Government Board, but it contains little that is not already known, although Dr. Klein corroborates Pfeiffer's statements in regard to the existence of an influenza-baeillus.

OUR Correspondence columns contain several important letters. Mr. Grierson replies on the diastase and starch question, and an American pharmacist objects to the views which we recently expressed regarding his calling there. Other interesting topics are discussed.

OUR Paris correspondent reports a strange blunder on the part of analysts, which has resulted in a woman being imprisoned for poisoning. Her supposed victims really died from the gaseous exhalations from a lime-kiln; nevertheless, the analysts found poison in the stomach, they said.

WE report a number of prosecutions for the sale of vinegar alleged to be diluted acetic acid. Two of these cases occurred in Wales, and the curious defence was set up that it was pure acetic acid, not pyroligneous, which was contained in the liquid. In one of these Somerset House chemists are to decide the matter. The other cases are in Sheffield, and resulted in convictions.

At the meeting of the American Pharmaceutical Association in Chicago a fortnight ago, Mr. Carteighe was present, and made a long speech on the necessity of education for the pharmacist. Professor Remington's address was on the new U.S. Pharmacopœia, a first copy of which was presented to him. We give a full report of the meeting, and portraits of Professors Remington and Maisch.

THE PECULIAR ODOUR OF THE URINE following upon the eating of asparagus is caused by methyl-mercaptan. This has been determined by Nencki.

English Rews.

The Editor is obliged to correspondents who send local newspapers containing views of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

The Suieide-mania.

The outbreak of suicidal mania within the past month is responsible for an unusual number of deaths from poison in all parts of the country. One of the saddest cases is that of Mr. W. G. G. Stokes (30), M.A., M.B., a son of Sir G. G. Stokes, late President of the Royal Society. Mr. Stokes had purchased a partnership in the practice of Dr. Wardle, Caundon, near Bishop Auckland, and went there to begin duties on Tuesday, August 15. On Friday morning last week the housekeeper could get no answer to her call, and, entering the room, found him apparently sleeping, but breathing heavily. On the mantel was a letter to the following effect:—

August 24, 1893.

My memory is going fast. My nerves are gone. I feel I am going mad-I con't sleep. I mean to sleep sound to-night. May God and my family forgive me! WM. G. G. STOKES.

1.20.—I am getting drowsy, but have not slept.

2.45.—Have got no sleep. I am tired of this.

Dr. Wardle kept him alive by artificial respiration, and kept the heart going by the action of electricity for sixteen hours, but he was never conscious. The cause of death was an overdose of morphia, and the jury returned a verdict to that effect.

George Grumbill (42), a Bromley gardener, had spent three weeks in drinking, and on Thursday night of last week arrived home carrying a quart bottle full of what his wife took to be beer. He poured out a tumblerful, drank it off, and was soon rolling on the floor. He said he wanted to be sick, and while his wife fetched a basin he crawled into the back yard. A doctor was fetched, but the man died in a few minutes. The contents of the bottle from which the deceased drank was arsenical "weed-killer."

Adeline Webb (43), a woman living in Gloucester, quarrelled with the man with whom she cohabited, purchased some oxalic acid from a chemist of the town, and, it is supposed, took it on the Saturday night. She complained on Sunday of being giddy, and died on Tuesday, August 22. The Coroner's jury said last Friday it was the poison that caused death.

William Cole, a newsvendor, died in Guy's Hospital last Friday from the effects of poison which he took in the presence of his wife, saying it was gin. After taking it he fell upon the floor, and his wife examined the bottle, and saw that it was labelled "Poison. Strong hydrochloric acid. Dodd & Pywell, 244 Westminster Bridge Road, and 83 Waterloo Road."

William James Patterson (47), a tobacconist's manager, died at his house, Buckingham Street, Fitzroy Square, from evanide-of-potassium poisoning. At the inquest by Dr. Wynn Westcott, it transpired that he had been drinking heavily, and was out of work.

Carbolic acid has been used by two men to end their lives—in both cases successfully. Thomas O'Donnell (57), a steam-boiler fireman at Pendleton, and Robert Rooke (55), a violin and banjo teacher, of East Dulwich, were the victims, and their deaths were investigated last week.

Company Meeting.

The annual meeting of Lawes' Chemical-manure Company (Limited) was held on Friday, August 25, at 58 Mark Lane. The report of the directors stated that the profits were 26,362L, out of which a dividend of 7 per cent. was recommended on the preference and 10 per cent. on the ordinary shares, while it was proposed to write off 5,000L from land, plant, leases, and goodwill account, to transfer 3,000L to reserve funds, leaving 6,772L to be carried forward. Mr. W. Colchester, the Chairman, said the year had been a rather hard one for trade, but there had been an increase in sales and profits.

British Association Announcements.

During the forthcoming meeting at Nottingham M. Moissan will give a demonstration of the properties of fluorine before the Chemical Section. There will also he two important discussions—one on "Bacteriological Work, and the Chemical Problems connected with it"; the other on "Explosions in Coal-mines, with special reference to the Dust Theory." Professor Percy Frankland will open the former discussion, and Professor Harold Dixon the latter.

Photographie Congress.

A congress of the Photographic Society and affiliated societies is to be held on October 10, 11, and 12. The arrangements are in the hands of Mr. Chapman Jones, 50 Great Russell Street, W.C.

Reconsidering a Verdiet.

Mr. W. Saunders Smith, solicitor, High Street, Wednesbury, was found dead on July 12, at the bottom of his office steps, under singular circumstances, and his death was the subject of a coroner's inquiry, which resulted in a verdict of death from stoppage of the heart's action. Subsequently, however, a gentleman communicated with the Deputy-Coroner, and a post-morten examination was made by Dr. Dingley, who found no evidence of disease. The contents of the stomach were analysed, the whole facts of the case brought under the notice of the Home Secretary, and he ordered a fresh inquiry. This was held by Mr. Topham, Deputy-Coroner, at Wednesbury, on August 25, and amongst the witnesses was Dr. Dingley, who stated that, at the request of the Coroner, he tested the solution of the alcoholic extracts from the stomach, but he was dissatisfied with the result, not having the proper instruments at his command. He subsequently consulted Mr. Jones, the analyst at Wolverhampton, and used certain instruments. They concentrated the solution, and discovered the presence of strychnine in the stomach in sufficient quantity to cause death. He was of opinion that deceased died from a dose of strychnine. This the jury agreed with.

Deluged with Vitriol.

On Monday afternoon an elderly man was delivering a quantity of chemicals to Messrs. Gale & Co., wholesale druggists, of Bouverie Street, Fleet Street. He was carrying a wicker-covered carboy of vitriol on his back. By some means the bottle burst, and deluged the poor fellow. His injuries were treated in Messrs. Gale's premises.

Too Much Zine Ointment.

At the last fortnightly meeting of the Belper Board of Guardians a short discussion took place with respect to the drug-account, especially in regard to the sum for zinc ointment, which was 16/.

Mr. Bridges asked what might the amount of drugs be for the year?

The Clerk: If you will look at the book containing the yearly accounts of the Union, you will see them. I cannot just remember.

Mr. Shaw: Have we the power or authority to stop the doctor from having what he thinks proper and requisite for his duties?

The Chairman: I think you have power to refuse the quantity he may order.

Mr. Calvert: 16l. is a great sum.

Mr. Cooper: May I ask, Mr. Foster, if the paupers complained of going short of medicine or pills when we had less in the house?

Mr. Foster: There is a quantity of things that the inmates casually want.

Mr. Waite moved, and Mr. Bown seconded, that they only have half the amount of zinc ointment.

Another Win for Chemists.

May & Baker's C.C. played Ranelagh C.C. at Battersea Park on Saturday, and won easily. May & Baker's team hit up 81 in the first innings, of which Arnold (24), King (23), and Horsley (14) were the chief contributors. The Ranelagh could only manage to get within 10 of this number, the chief scorer being Crisp (20 not out).

The Dartford Cottage Hospital.

In the absence in America of Mr. S. M. Burroughs, his solicitors have issued a statement of their client's intention with regard to the proposed erection of a cottage hospital for Dartford. It appears that Mr. Burroughs has waived all the conditions which were considered objectionable in his offer to subscribe 1,000\(lambda{L}\), and that he endeavoured to secure a gift of a site from Lord Tredegar, and would have been successful, but that the committee considered his lordship's site an unsuitable one. Mr. Burroughs has deposited his 1,000\(lambda{L}\), with the London and County Bank at Dartford, and now promises to pay it over as soon as another 2,000\(lambda{L}\), is promised, or to subscribe unconditionally twice as much as any single donor, within the limit of 1,000\(lambda{L}\).

Wine-lieenees.

At Eastbourne Brewster Sessions, on Monday, Mr. Lawson Lewis applied for licences to sell wines, spirits, and liqueurs on behalf of Mr. Geo. Chas. Dusart, chemist, 53 Terminus Road, Eastbourne, and Mr. Robert H. Trickey, chemist, 30 Terminus Road, Eastbourne. Both applications were granted.

At the Huddersfield County Brewster Sessions similar Ticences were granted to Messrs. J. W. Beaumont and C. E. Lawton, chemists, 231 Lockwood Road, Huddersfield.

Mr. Francis Brunt, chemist, Coalville, asked for a licence for his branch shop at Church Gresley, Swadlincote, and his application was agreed to by the Justices.

The Conference Photo.

Mr. Gill, of Nottingham, informs us that the photograph taken at Wollaton Park, on Wednesday, August 16, has turned out successfully. Copies may be obtained from Mr. Bolton or Mr. Gill, or from Mr. A. Neale, St. Peter's Church Walk, Nottingham. The price of the photograph, with key, is 6s. The key is in preparation.

The Worthing Fund.

Mr. Frost writes to say that in response to the appeal made for the Worthing Sick-poor Fund the following subscriptions have already been received from the drug and allied trades:—

					£ s. d.
Messrs, R. Hovenden & Son					5 0 0
The Snssex Drng Company					1 1 0
Messrs. D. & W. Gibbs					1 0 0
The Berkefeld Filter Company	(Lim	ited)			1 1 0
Messrs. Hodgkinsons, Treacher	& C1	arke			0 10 0
" May, Roberts & Co.					1 0 0
" Herring & Co					0 10 6
Mr. White			• •		0 10 0
Messrs. Hearon, Squire & Fran	eis			• • •	1 1 0
The Apollinaris Company					1 1 0
Messrs. Hill & Son				•••	2. 2 0
" Meggeson & Co				••	1 1 0
" Toogood & Son				• • •	1 1 0
Mr. A. S. Hill					2 2 0
" E. R. Biggleston, Canterbu		••	••		0 5 0
Messrs, Potter & Clarke		••	• •	• •	0 10 6
Mr. James Townsend		••	• •	••	0 5 0
" John Thorp, Heaton Chape	31		••	••	2 2 0
Messrs. Burrougbs, Wellcome		•••	••		3 3 0
Mr. H. Silverlock			••	• •	
Messrs. Allen & Hanburys	• •	••	••	••	2 2 0
" F. Newbery & Sons	• •	• •	• •	• •	
David Observation 2 8 Cl	••	••	• •	••	1 1 0
Conith & Co	• •	••	• •	• 4	1 1 0
E Pontlon & Com	• •	••	• •	• •	1 0 0
	• •	• •	• •	• •	1 1 0
" Harker, Stagg & Morga " Blondean et Cie		••	• •	• •	0 10 6
	• •	• •	• •	• •	0 10 6
F. Schntze & Co	••				0 5 0
Valentine's Meat-juice Comp	any 1	Z poti	les of	the ju	ice.

The Cooling-medicine.

At the Guildhall Police Court, on Tuesday, before Mr. Alderman Treloar, William Chandler (48), described as a clerk was charged on remand with attempting to obtain, by means of a forged order, of Messrs. S. Maw, Son & Thompson, chemists' sundriesmen, Aldersgate Street, one dozen of Eno's Fruit-salt and a dozen of Lamplough's Pyretic Saline, with intent to defraud. Particulars of the case were given last.

week. The prisoner was now further charged with obtaining, by means of a forged order, from the same firm three dozen boxes of Beecham's pills. The Alderman committed him for trial.

A Chemist's Assistant in Trouble.

At the Woolwich Police Court, on Saturday. Arthur Henry Fisk (24). chemist's assistant, Folkestone, was charged before Mr. Marsham with stealing a silver watch, value 30s., from Frederick Boare. 5 Ordnance Road, Woolwich. Prosecutor was employed at the Royal Military Academy, and was formerly in the army, and knew the prisoner whilst he was serving in the Medical Staff Corps. On July 31 prisoner called on him, and said he had come from Folkestone and had spent all his money. He asked for a loan of 5s. to pay his fare home. He lent him the money, and the prisoner went into a room to write his address. On leaving, the watch was missed, but had been recovered. James Dowsett, a dairyman, said he knew the prisoner, who came to him on August 1 and borrowed 10s., leaving the stolen watch as security. Detective-sergeant Bishop said that when he apprehended the prisoner and told him the charge he said, "I will easily get over that." There was another charge against the prisoner, which was being investigated. Mr. Marsham remanded the prisoner.

Wood-distillation a Nuisance.

At the Wolverhampton County Police Court last week William Hill, sen., and William Hill, jun., chemical-manufacturers, Deans Road, Heath Town, were charged by the Local Board, with establishing an offensive trade within the district for the production of charcoal, acetate of lime, naphtha, and tar without the consent of the local authority; further, with carrying on the business without the consent of the urban authority; and also with carrying on the business so as to cause a nuisance. After the case for the prosecution had been gone into, Mr. E. W. T. Jones, county analyst, said he found nothing to cause a nuisance, and could not suggest improvements, but the Magistrates adjourned the case for two months to enable the defendants to adopt the best means to avoid a nuisance.

Frish News.

Horse Show.

At the Royal Dublin Society's Horse Show, held last week, the following firms had stands which were energetically attended to by their managers and assistants:—S. Boyd, chemist and druggist, 46 Mary Street, Dublin—horse, sheep, and cattle medicines, and agricultural chemicals: McMaster, Hodgson & Co. wholesale and retail druggists, Capel Street, Dublin—cattle-medicines, fluid ext. annatto, and linseed and boiled oils; Jeyes' Sanitary Compounds Company (Lim.)—disinfectants and sheep-dip; Tomtinson & Hayward, Lincoln—glycerine sheep-dip; Fannin & Co., Grafton Street, Dublin—surgical instruments and appliances; Day, Son & Hewitt, London—veterinary medicine-chests, instruments, and cattle-medicines of all descriptions; the North of Ireland Chemical Company—sheep-dips and agricultural chemicals; Lawes' Chemical Company, Dublin and London—chemicals and sheep-dips; and the Hippacea Company Birkenhead.

New Pharmaey.

Mr. Charles L. Cosbie, pharmaceutical chemist, has opened a new pharmacy and drug-hall at Elgin House, Ballsbridge, Dublia.

Scotch Rews.

Carbolic-acid Poisoning.

Chemists sundressmen, Aldersgate Street, one dozen of Eno's Fruit-salt and a dozen of Lamplough's Pyretic Saline, with intent to defraud. Particulars of the case were given lart a tumbler containing dregs of carbolic acid. It is supposed

that he had taken a quantity, but, as there is no coroner in Scotland, the matter will be investigated by the Procurator Fiscal.

Edinburgh Pharmaey Club.

The Golf Section of this club held their August competition on Saturday over the Braid Hills course. Mr. J. D. Horsburgh won the Dick handicap medal, Mr. J. A. Forret being second. In the T. & H. Smith trophy competition, Messrs. Wilson and Forret proved successful for the second time. Their opponents in the final were Messrs. Simpson and Horsburgh. The game was a close one, but Messrs. Wilson and Forret finally won by 3 up and 2 to play.

French Pharmaceutical News.

(From our Paris Correspondent.)

Ferrous Vegetables.—A French veterinary surgeon, M. Viaud, has originated a system of administering iron to anæmic patients by means of vegetables. M. Viaud has succeeded in growing several kinds of ferrous vegetables in his kitchen-garden, and declares that, although iron can be shown to be present in them in appreciable proportion, the vegetables preserve their natural taste.

A HAPPY RELEASE.—The pharmacist Émile Chardon, who was arrested in Lyons, early in June last, on suspicion of being the assassin of M. Francis Angeles, at Marseilles, as reported at the time in The Chemist and Druggist, has just been set at liberty. He was kept in prison ninety days, and the Magistrate could only inform him that his innocence had been perfectly established. The poor fellow's reply—"Ce n'est pas malheureux!" was certainly to the point, if not exactly polite. The cause of Chardon's arrest was that he was known as a traveller in the drug-trade, and when arrested had just reached Lyons from Marseilles and had applied for relief at the casual-wards in the former town.

A DEVELOPMENT.—A new bicycle-track for racing was opened in one of the suburbs of Paris last Sunday, under influential patronage, as far as names are concerned. A novel feature was that the advertisements announced a "medical committee" of the track consisting of six doctors, whose names are given, and one pharmacist, who is anonymous. The idea of a well-appointed pharmacy at a bicyclerace prompted the representative of THE CHEMIST AND DRUGGIST to attend the meeting; but, unfortunately, nothing could be learned of the new development. This may partly be due to the immense crowd that was present, and partly to the unfinished state of the buildings; but the pharmacy was as anonymous as the pharmacist, and both were undiscoverable. It looked well in print, however.

Assaying for the Codex.—At a recent meeting of the Paris Pharmaceutical Society M. Portes made a communication in regard to the assay of cantharides, cinchona, and opium, with the view to the adoption of certain of his proposals in the Supplement to the Codex, now under preparation. In regard to cantharides he showed that a proportion of 0.7 to 0.8 per cent. of cantharidin was a fair average of the drug as found in commerce. The Society agreed with his suggestion that this standard should be adopted in the Codex, at the same time also agreeing to some minor modifications in the opium-assay process. M. Portes has to make some fresh experiments in regard to the assay of cinchona before his suggestions are adopted, and until he makes this supplementary report the decision upon this drug is reserved.

QUEER ANALYSIS.—A miscarriage of justice has just come to light, after causing an innocent person to be imprisoned for six years. A woman named Bruaun was condemned in November, 1887, to hard labour for life on the charge of poisoning both her brother-in-law and her husband. The expert chemists and doctors declared at the trial that, after analysis of the viscera, they could only state that both men had died from a poison the nature of which it was impossible to determine. Unfortunately for Mme. Bruaun it was conclusively proved that she had relations which might prompt her to poison her husband, and she was condemned.

Not long since another death occurred in the same house, having all the mysterious symptoms of those for which the woman was suffering imprisonment. The expert chemists and doctors were again in request, and they discovered the presence of a lime-kiln near the house, easily deducing in consequence that the deaths had been caused by poisoning through the foul gases emanating from the kiln. The possibility of Mme. Bruaun's innocence was thus sufficiently established, and she was released last week. Freedom is her only, and not very tangible, satisfaction.

A PHARMACIEN'S POLITICS have been the cause of a small scandal in the 16th arrondissement of Paris. A worthy pharmacist, who may be called M. X, has a daughter, who, during last winter, made the acquaintance, at a charity ball, of a young but poor gentleman. The young couple followed the not unusual course of falling in love, and the customary routine of "asking papa," and publication of the banns was gone through. Formal invitations to the marriage were issued; but on the morning of the wedding-day it was found that Mademoiselle X. had disappeared with her fiancé. It has transpired that since the commencement of the electioneering campaign the young gentleman had, in spite of his poverty, insisted on his future father-in-law voting for M. Calla, a monarchist. On the other hand, the worthy pharmacist, who is something of a revolutionist, wished the young man to support the socialist, Asticr. The result was numerous discussions which threatened disaster to Mademoiselle X.'s matrimonial prospects. The young people have left for the sea-side, and have sent the parents a letter asking pardon, and promising to return to get married at the commencement of winter. As a postscript the young gentleman especially recommends, the pharmacist to support M. Calla's candidature.

A Mission to Chicago has just been accomplished by M. Ernest Milliau, a chemist well-known for his researches and discoveries in the analysis and examination of fatty bodies. He holds the position of Director of the Official Laboratory of Technical Tests at Marseilles, and the mission confided to him by the French Government was of a somewhat important nature. M. Milliau's instructions were to hold conferences, followed by practical experiments, on the methods employed in France for the chemical analysis of fatty bodies, to demonstrate the superiority of these methods,. and by this means to endeavour to bring about between the two countries the adoption of a uniform system of inspection. He was to study the processes followed in America for manufacturing these products, the frauds to. which they may be subject, and also the extent to which they are exported. Another important part of M. Milliau's programme was to endeavour to develop the commercial relations between the United States and the colony of Tunis. The French chemist seems to have been very pleased with the reception accorded to him by his confreres in the States, as also by the manufacturers. He reports that his lectures at various universities were well attended, besides being analysed and reproduced by the entire Press of the country, while at Washington the offices of the Ministry of Agriculture were placed at his disposal. It appears that Professor Wiley paid M. Milliau the compliment of asking permission to read one of his lectures at the International Scientific Congress that was commenced in Chicago on August 22. M. Léon Berrier acted as M. Milliau's assistant in America, and the latter's report terminates thus: -"The best results may be anticipated from this mission, as much for the renown of French science as for the adoption of its methods, and the development of our export trade with North America."

foreign and Colonial Rews.

PROFESSOR JOHN KING, M.D., of Cincinnati, O., one of the founders of eclectic medicine, died recently. He waspast 80 years of age, and was the author of the "American Dispensatory."

MEXICAN BISMUTH.—Several species of bismuth have been discovered in Mexico. In its native form it is obtained from the Cristo mine; in sulphides on the Gonzalez Hill, near Ojo-

Caliente, in the State of Zacatecas; and on the Sierra of Santa Rosa, in Guanajuato, there is selenide, which has yielded from 59 to 67 per cent. of metal, the ore being a sesquiselenide, which has received the name of guanajuatita.

COLOUR-BLINDNESS AMONG PHARMACISTS.—At a recent preliminary examination for apotheker's assistant, held at Bromberg, in Prussia, it accidentally transpired that one of the candidates suffered from colour-blindness. The Government representative who was present, exafficio, at the examination, decided that colour-blindness ought to be enumerated in the assistant's testimonial, in which the mention of the holder's physical defects appears to be obligatory. He has therefore issued a circular to the officials concerned, instructing them in future to examine every candidate for the pharmaceutical examination for colour-blindness.

MADRID UNIVERSAL EXHIBITION.—An international exhibition is to be held at Madrid from April 1 to October 31, 1894, under the patronage of the Queen Regent of Spain, and, according to the general regulations, "under the agis and patronage of an international committee composed of notorious persons from all countries, &c." In the exhibition itself, the various arts and manufactures will be divided into fourteen groups, of which Group III. will be devoted to chemicals and their manufacture, including general chemicals, pharmacy, perfumery, bleaching, dyeing, sizing, &c., tannery, distillation and its apparatus and machinery, and Group XII. to liquid and solid alimentary products. The tariff for exhibitors is as follows:-Covered spaces of one front, 31. per square metre; non-sheltered places in the open air, with one front, 2l. per square metre; isolated spaces at special terms; wall-spaces for plans, maps, pictures, &c., 2*l*. per square metre. An international jury will be formed to examine the value of the goods exhibited, and the rewards will consist of diplomas of grand prize, honour, gold medal, silver medal, bronze medal, and honourable mention. Intending exhibitors are requested to apply to the Secretary, Palacio de la Industria y de las Artes, Madrid, but copies of the regulations may be obtained at the office of the Spanish Consulate, 23 Billiter Street, London, E.C.

PHARMACY IN EUCADOR.—The British Consul at Guayaquil has evidently been much impressed with the opening in his city of what appears to the cold eye of the critical reader a well-equipped pharmacy, but which, under the glowing imagination of the Consul, who has written home a special report of the inauguration of the place, has assumed the dimensions of a gigantic "chemical and industrial laboratory." "Under the name of 'Laboratorio Quimico é Industrial'" (writes the Consul), "Messrs. Flores, Ontaneda & Co., first-class druggists, of this city, have opened a general scientific laboratory in Guayaquil. The opening ceremony, which took place on Sunday, June 25, was witnessed by thousands of interested spectators, and from early morning until late in the afternoon the stream of visitors was uncheeked. The lower storey and wings of the building are divided into numerous compartments, each in itself a complete laboratory and museum. Foremost amongst these is the bacteriological department, of which Señor Ontaneda is the curator. Amongst otherobjects which attract attention is a complete collection of microbes ranging from trichine—(sie ')—to the more recently discovered germs of Cholera morbus." They have long hankered for a sight of the cholera bacillus in Guayaquil, it would seem, for the Consul assures us that "the institution has supplied a long-felt want." It is to be hoped that now the Guayaquileños have a chance of seeing what the bacilli of dangerous diseases are like, they will take care to put their city in a state of sanitation that will keep them from breeding there.

BRITISH COLUMBIA PHARMACEUTICAL ASSOCIATION.—We have received from the Secretary of this Association a report of the annual meeting held at New Westminster on June 8. The report submitted showed that there are 46 dicentiates of pharmacy in business in the Province and 23 acting as clerks, as well as 17 apprentices. These figures are for the year ending April 30, 1893. There was a slight falling-off in registrations after May 1, but there will doubtless be a recovery before the year is out. The distribution of the men in business is as follows:—Victoria, 17; Vancouver, 14; New Westminster, 6; Nanaimo, 4; Chilliwack, 1; Kamloops, 1; Ainsworth, 1; Vernon, 1; and

Esquimalt, 1. Mr. Shotbolt, the President, in the course of his address, said the Association is flourishing, and the Pharmacy Act has proved itself to be a magnum bonum Speaking of the trade of the Province he said that although it had been bad, and druggists felt the strain with the rest, so far they had all managed to keep above water, and no assignment in the drug-trade is likely to be made in British Columbia. The President was thanked for his address, and thereafter vacancies in the Council were filled The following are the officers for 1893-94:—President. H. McDowell, Vancouver; Vice-President, T. M. Henderson, Victoria; Secretary-Treasurer-Registrar, Charles Nelson, Vancouver. Council: Thomas Shotbolt, Victoria; T. M. Henderson, Victoria; J. Cochrane, Victoria; H. McDowell, Vancouver; T. E. Atkins, Vancouver; and D. S. Curtis, New Westminster. Examiners (for licence): T. M. Henderson, Vietoria; Charles Nelson, Vancouver; and H. H. Watson, Vaneouver. The members of the Association were in the evening entertained to a banquet by the local druggists, Mayor Curtis, Messrs. McPherson, Muir, Herring, and Burnett.

VANILLA-CULTIVATION IN MEXICO.—There are no records to show when the cultivation of the vanilla-vine commenced in Mexico, but it must have been some time after the subjugation of the country by the Spaniards, for at the time of the Conquest all the vanilla used appears to have been gathered from wild plants. There is evidence, however, to show that in 1760 vanillales, or vanilla-plantations, existed near Papantla, which is still the chief centre of the industry. Six varieties of vanilla are known in Mexico-namely, the mansa, the cimarrona, the mestiza, the pompona, the puerco, and the mono. Of these the mansa is the only one cultivated. The cimarrona, or wild vanilla, has a more pointed leaf and a thinner stem than the mansa; the pod is shorter, rounder, and thinner. The mestiza has more pointed leaves than the mansa, but less so than the cimarrona; the size of the pods is smaller than those of the mansa, and larger than those of the cimarrona. This variety is searce, and, when prepared, it can hardly be distinguished from the mansa. The pompona (siguexante or banana vanilla, as the Totonaco Indians, who occasionally eat it, call this variety) has larger and rounder leaves, and a stem one half thicker, than the mansa; the pod is double the size, and triangular in shape, resembling somewhat a badly nourished plantain; it has an extremely pleasant smell, not unlike anise, and is used in Havana by the tobacco-manufacturers to mix with eigars. The puerco and mono, which grow wild and resemble the cimarrona, are not used in commerce. There is yet another vanilla, called the tarro, or bamboo vanilla, which is considered by many as a distinct species, but is really nothing else than the mansa grown in the tarrales, or bamboo thickets, in the depths of the virgin forests, where it does not receive a sufficiency of sun and air, and produces a pod thinner and longer than the ordinary mansa. Formerly the vanilla-dealers distinguished several varieties and subvarieties of the article, but at the present time the only grades recognised in commerce are the best class, the cimarrona, or wild vanilla, and the rezacate, or short, damaged, immature and overcured pods.

Gazette.

PARTNERSHIP DISSOLVED.

Taylor, F. W., and Huband, T. A., Cheltenham, under the style of Taylor & Huband, veterinary surgeons.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Duncan, Alexander, Bournemouth, chemist and druggist.

Rumboll, Henry Augustus, Bristol, veterinary surgeon and shocing-smith.

ADJUDICATIONS.

Best, James, Kenninghall Road, Clapton, N.E., late Moorgate Street E.C., of no occupation, late chemist.

Jones, Joshua Evans, Barry Dock, chemist and druggist.

AMERICAN PHARMACEUTICAL ASSOCIATION.

THE first session of the forty-first annual meeting of the American Pharmaceutical Association was called to order by Professor J. P. Remington, of Philadelphia, the President, in the Hall of Columbus, Art Institute, Chicago, on Monday, August 14. The hall was nearly filled, although it seats over 2,000.

After the usual routine of introductory work, President REMINGTON delivered the

PRESIDENTIAL ADDRESS.

In opening his address, President Remington spoke of the fact that for the second time in the forty-one years of its existence the Association met in Chicago. Referring to the presence for the first time of delegates from the American Medical Association, the President hoped that one result of this might be the establishment of a joint body or commission for the purpose of securing needed legislation for restricting the practice of medicine and pharmacy to those only qualified to perform such responsible duties. Speaking of the revision of the Pharmacopæia, he said that a majority of the members of each committee for the past thirty years have been pharmacists. In 1890, of the twenty-



Joseph Price Remington, Ph. Mag., F.C.S., F.L.S., &c., was born in Philadelphia, on March 26, 1847. His father was a physician, and his mother the daughter of an apothecary of that city. His great-grandfather, Townsend Speakman, was among the first apothecaries in Philadelphia, having emigrated from England soon after the settlement of Pennsylvania. Mr. Remington served three years in the wholesale drug-trade, and in 1867 entered Squibb's laboratory. Afterwards he was engaged with Messrs. Powers & Weightman, and in 1872 he purchased a drugstore in Philadelphia. Upon the death of Professor Proeter, in 1874, Mr. Remington was appointed Professor of Pharmaey in the Philadelphia College. He sold his drug-store some years ago, and devotes his entire time to his professorial duties, his chair being one of the richest, if not the richest, connected with pharmaey, in the world.

six members of the Revision Committee, sixteen were members of the A.P.A. He regarded the new Pharmacopoia as one of the events of this year. The chairman, Dr. Rice, had forwarded to the meeting, for inspection, the first copy of the latest revision, just issued from the Press, and although the ink was scarcely dry upon its pages, a perusal of its contents would convince the reader that the committee's labours had been arduous, while those of the talented Chairman had been little less than Herculean. (Applause.) The President then reviewed some of the prominent features of the work, which becomes official on January 1, 1894.

Professor Remington proceeded to comment upon the general principles which had guided the committee in their work. In pharmacy, the new Pharmacopæia shows great progress over methods in use during the past decade. The

subject of percolation will receive greater impetus on account of the wide application of its principles than ever before; but discrimination has been manifested, and in a few instances, where the physical structure of the drug rendered percolation impracticable, maceration has been preferred. The important class of liquid galenicals, fluid extracts, and tinctures have had important additions made to their number. In nomeuclature, a new class called "emulsers" has been created, and some of the former mixtures placed in it, and it is hoped that before another revision of the Pharmacopæia, pharmacy will have advanced to such a degree that we may have accurate definitions of the various classes of preparations.

In closing, President Remington said that, while careful deliberation upon subjects immediately affecting the interests of the Association should be their first occupation, yet the researches and labours of the great world beyond the sea should command most serious attention. This is especially the age of synthesis. Analysis is active and full of life; but constructive methods at present give to the world more rapid and practical return than those which are destructive, and applied chemistry is calling large numbers to her allegiance.

The effect upon pharmacy and medicine of this extraordinary activity in the synthetical departments of chemical science has been profound. New chemical compounds and new classes of compounds have been flooding commerce likea deluge, the more valuable ones being protected by letters patent or by copyright names. Competition among the large manufacturers is extremely fierce, and the result to the average pharmacist has been the greatest confusion, uncertainty, and annoyance. It might be supposed that the Pharmacopæia would accept remedies of this class, but the Convention of 1890 clearly defined its position as follows:-"No medical substance which cannot be produced otherwise than under a patented process, or which is protected by proprietary right, shall be introduced into the Pharmacopæia." (Applause.) It is clear that any substance which is controlled by one manufacturer or corporation becomes a law nuto itself, and any test, limitation, or standard of purity established by the Pharmacopæia could be rendered nugatory at the whim of the manufacturer if it suited his purposes, and the Pharmacopæia would stultify itself by admitting a substance under certain impurity limitations if it were found subsequently that the only substance that could beobtained in the market was one that deviated from thestandard established.

On the motion of Mr. KIRCHGASSER, the President's addresswas referred to a committee of three-Messrs, C. L. Diehl, H. R. Slack, and Henry M. Whitney.

Illness of Professor Maisch.

Mr. ZWICK moved that the chair be requested to appoint a committee of three to frame a resolution expressing the deep sympathy of the Association with Permanent Secretary John M. Maisch in his serious illness, and to express also the deep regret experienced in losing his valuable services. The chair appointed on this committee Messrs. Hoffman, Zwick, and Ebert.

Professor Remington then introduced Mr. M. CARTEIGHE, the President of the Pharmaceutical Society of Great Britain, who said:—Mr. President, ladies and gentlemen,—I confess that I am not a little disappointed at this moment by the announcement just made, that Professor Maisch is unable to be present. I have a special reason for this, because I had conceived a little surprise for him. I am not quite sure whether I have not travelled faster than the mails, and what I have to say may be news to you, but I happen to have in my pocket a gold medal,

THE HANBURY MEDAL,

which has been awarded to Professor Maisch. (Applause.) This medal. you will remember, gentlemen, is awarded biannually only. It was founded in honour of the late Daniel Hanbury, is international in its character, and is not limited to any part of the world. It is not open to competition, it is open to no examination, but the award is effected by a process of selection, and the officers of the principal societies in Great Britain are the officers who have to make this award. Under the terms of the trust-deed, those officers are the President of the Chemical Society for the time being,

the President of the Linnæan Society, the President of the Pharmaceutical Society of Great Britain, the President of the British Pharmaceutical Conference, and one pharmaceutical chemist nominated by the two pharmaceutical Presidents. Well, as a result of their deliberations a fortnight ago, the award, as I have already stated, was made, and I feel that officially, perhaps, it would be wrong for me to have made this announcement to you, sir, and to the members of the Association; but I felt under the circumstances it would be the proper thing for me to do, and I could not help referring to it in this manner. In awarding this medal to Professor



Johann Michael Maisch was born in Hanau, Germany, on January 30, 1831. He received a scientific elecation, and, in consequence of his taking part in the Baden Revolution of 1848, emigrated to the United States in 1849, where he made his first acquaintance with pharmacy, serving in the capacity of an assistant in Baltimore, Washington, Philadelphia, and New York. He also passed some months in a chemical-factory. In 1854 he became associated with Professor W. Procter in the editing of the American Journal of Pharmacy, this being the beginning of a literary career which has continued up to the present time. In 1859 he acted as an assistant to Edward Parrish in his private school of pharmacy for medical students, and in 1861 was appointed Professor of Materia Medica and Pharmacy in the New York College of Pharmacy, at the same time working in Squibb's laboratory. He left New York after two years to nudertake the management of the U.S. army laboratories which had been established in Philadelphia. This he held until the end of the war, effecting during his two and a half years' office a saving of between three and four million dollars. After this work Mr. Maisch opened a pharmacy in the Quaker city, continning meanwhile his literary labours, and in 1867 was appointed Professor of Botany and Materia Medica in the Philadelphia College of Pharmacy. He has acted as permanent secretary to the American Pharmaceutical Association since that date. He holds the honorary title of Doctor of Pharmacy from the Maryland College, and of Magister of Pharmacy his alma mater.

Maisch, the fact of his work was well and carefully considered. You know the work for which this medal is awarded is high excellence in the chemistry and natural history of drugs, in the widest sense of the term—the sort of work that Hanbury used to do—and it would be presumptuous in me to make any reference to the merits entitling Professor Maisch to receive this award.

... All that I can say in regard to him is, that he is a fair successor to the many distinguished men to whom that award

has been made in the past—Flückiger, in the first instance, then Dragendorff, Elliot Howard, Planchon, next Hesse and lastly to Professor Maisch. (Applause.) These men, I think you will admit, are men of very great distinction. In making this award of the trustees, I am charged by the Council of the Pharmaceutical Society of Great Britain and by all its members to convey to Professor Maisch the congratulations, hearty and sincere, of all its members upon the occasion of this award to a distinguished American pharmacist. (Applause.) The instructions that I carry with me are that this medal is to be awarded by the President of the International Pharmaceutical Congress at its meeting next week, and I think that may be probably arranged in due course; but it seems to me that under the circumstances I am in order in making this brief statement. Well, sir, putting aside this one touch of sadness in our meeting, allow me to say that I attend here to-day, and two of my colleagues are coming after me as fast as they can. We three members of the Council of the Pharmaceutical Society of Great Britainthe other two being Mr. Martindale, of London, and Mr. Martin, of Newcastle-come not only to attend the meeting of the American Pharmaceutical Association and the special World's Congress, but come also to this meeting to express in the heartiest manner our cordial sympathy from the Old Country to you, and to express our admiration for the work which you are doing. You gentlemen and we in the Old Country represent pharmacy so differently and so distinctly from the way it is represented in Europe generally and in all the older countries that we are, as it were, tied together specially to consider how fast to advance our calling by mutual and voluntary efforts rather than by stated ends. You know that you and ourselves have to do our work through corporate bodies and associations, and do our work without any subsidy from our Governments. We have to encourage our young men to qualify themselves without the Government itself taking, in most cases, a very active part, and I am not prepared to say that either you or ourselves have been wholly unsuccessful. (Applause.) It may be a question whether the continental system, where Government, as a rule, gives help, is not the better one—that is a question. But, whether or not, I am perfectly certain that in the body Irepresent—I am quite certain, sir, in the body that you now represent—there is that liking for and that desire for free action uncontrolled by State, that would make us at present hesitate to adopt the continental system. Pharmacy, as you have hinted in your address, although coupled with other matters, is not a calling in which we expect to get rich, and I don't suppose that any one of us ever contemplated when we entered it, or our parents before us, that we should become rich-if so they were foolish-but we have a right to believe, and I think we have reason to hope, that with good qualifications and proper training and education on the part of the individual, we in the Old Country, and you in the New, may hope to get a living in the present state of the world, and that is something to be thought of. (Applause.) At any rate, in the Old Country we only contemplate that at the present time. Of course, I am aware that in this great country you Americans do outstrip the universe both in pharmacy and in many respects besides, and also in the acquisition of immense fortunes. On the other hand, I don't know-possibly it's my ignorance-that any pharmacist in the United States or any number of them have or are likely to acquire from pharmacy what the people popularly call a fortune, and I'm not sorry that it is so. The business or profession of pharmacy is one that, if it is worth anything, is worth working at. The man who complains of his pharmacy and of his fate I have always found to be a man who does not keep himself abreast of the work that is going on. The man who considers that education is not a power, and that it doesn't mean money (I hold that it does), and the man who would carry on his business as a butcher does-an ordinary trade-and who would at the same time demand from the public professional remuneration for the things which he sells, is not likely to get the respect of the public. It is true that we are under great difficulties on both sides of the Atlantic, for just as in the Old Country, pharmacy spreads not from above downwards; but from the old medicine-woman has been originated the practice of medicine in the Old Country, and in many respects it has been the same in the United States. Whereas, in the old continental countries, medicine came down from the pro-

Well, that being so, we have, in our essi onal elasses. respective countries, to deal with a class of the public who imagine that anyone can prescribe for them and that anyone can compound their medicines. That is the natural condition of things until they are educated, and it has taken us a long time in the Old Country to get the better-educated portions of the community, not pharmacists, to realise it. believe, in the large eities are doing that, and have done that part successfully, and one great advantage you have over usone for which I envy you—is the arrangement that you have for an enforced curriculum in most of your States, and the excellent opportunities you have for education, not only in

Chicago, but in all the principal cities.

What is wanted in pharmacy, as the President has said, is not that every pharmacist should be a highly-trained and highly-skilled synthetic and analytical chemist—some men there are who are so, but that is not absolutely necessary or even essential—but it is necessary and essential that every pharmaeist should know something of the methods by which the weapons he uses in the eure of disease and under advice of the physicians are constructed—to be able to ascertain by proper chemical processes that they are what they profess to be. If every man so educated insists in his own immediate neighbourhood that proper remuneration for his services shall be given, I believe that in the Old Country and in the United States before long the public will respect every one of us, and will pay us for our services professionally. (Applause.)

Mr. LORD, the delegate from the National Wholesale Drug

Association, followed with a short address.

Dr. Louis Egger and Mr. Neergardy, Christiania, Sweden, were then introduced by the President, and, after some

routine business, the session adjourned.

President REMINGTON, speaking of the number of strangers present, many of whom were from abroad, said that he earnestly hoped that every member of the A.P.A. would constitute himself a committee of one to see to their entertainment, so that their visit might be made especially memorable and enjoyable.

After adjournment, the members of the Association were tendered a very pleasant reception by the local committee, meeting at the Casino in the World's Fair grounds, where several hours were most enjoyably spent. Music and refreshments were provided, and the grounds being illuminated throughout the evening, the eelebration was of no common order.

On Tuesday the Association met in Hall 22 of the Art Institute. The first business was the appointment of

office-bearers, the following being elected :-

President, E. L. Patch, of Boston; Vice-Presidents, E. O. Daly, W. Rogers, and Charles Carpair; Treasurer, S. A. D. Sheppard, of Boston; Permanent Secretary, Jno. M. Maiseh, of Philadelphia; Reporter on Progress of Pharmacy, Henry Kraemer, of New York; Members of the Council, C. L. Diehl. of Louisville, Ky.; C. M. Ford, of Denver, Colo.; and Wm. C. Alpen, of Bayonne, N.J.

TIME AND PLACE OF NEXT MEETING.

Reporting on behalf of a committee, Mr. Sheppard said three places had been presented for consideration—namely, Asheville, N.C., Hot Springs, Ark., and Denver, Col. After eareful consideration and discussion of the subject, the committee had decided in favour of Hot Springs, and that place had therefore been selected, and the date of meeting fixed for the first Monday in June, 1894.

An excited discussion followed, in which the claims of Hot Springs, Asheville, and Denver were eloquently presented by representatives from those places, Mr. Morrison, of Montreal, finally making an appeal in behalf of Montreal, Ca. A ballot resulted in the selection of Asheville, N.C. Whitefoord G. Smith, of Asheville, was selected as the Local

Secretary.

Other business was then transacted, including the reception of Treasurer S. A. D. Sheppard's annual report, which showed a very encouraging state of affairs in regard to the Association's finances, which were on a very sound and satisfactory basis, in spite of financial disasters and the troublesome silver question.

It was agreed that \$150 be awarded to the writers of the three most valuable papers presented to the scientific section,

apportioned as follows: -\$75 for the first, \$50 for the second, and \$25 for the third.

It was also agreed to place the sum of \$1,000 at the disposal of the seventh International Pharmaceutical Congress for the compilation, publication, and distribution of an international Pharmacopæia.

After some other business, the Association gave way to

THE SCIENTIFIC SECTION,

which held its meetings in Hall 24, under the presidency of Professor C. T. P. Fennel. After an address from him, the following papers were read during sessions on Tuesday, Wednesday, and Thursday :-

"Laboratory Notes," by Professor E. L. Patch.

"Beef Extracts: their Manufacture, Composition, and Therapeutical Effect," by Professor C. S. N. Hallberg.

"An Improved Shape for Suppositories and Bongies" by H. S. Wellcome (Londou).

"Bougies," by Nicholas Pritzker, Ph.G.

"Atomic Weights," by Dr. Gustavus Hinrichs.

- "Preparation of Oak-tannin, with Special Reference to the Use of Aceton: as a Solvent," by Professor Henry Trimble.
 - "Canadian Potash," by Professor Reid (Montreal).
- "Oil of Cloves," by C. T. P. Fennel, Ph.D., Ph.G.
- "Commercial Varieties of Opium," by A. R. L. Dohme, Ph.D.
- "Gelsemium sempervirens," by Chas. Otis Hill, Ph.G. "Colocynth," by Geo. Wagner.
- "Investigation of the Menthol Derivatives," by Elward Kremers.
- "An Aseptic Irrigation-tube," by Adolph Levy.
- "Hydrastis canadensis," by F. A. Thompson.
- "Composition of Taraxacum-root at Various Seasons of the Year," by
- Professor L. E. Sayre. "Change of Volume when Liquids of Different Densities are Mixed," by
- William S. Scoville. "Recent Experiments with Ipecac.-root," by A. R. L. Dohme, Ph.D.
 - "Oleum Terebinthinæ," by Chas. T. P. Fennel, Ph.G.
- "Contribution to the Literature of Strychnine Determizes," by J. B. Nagelvoort.

"Caulophylline," by J. U. Lloyd.

- "The Value of Titration with Volumetric Acid Solution as a Means of Assaying Alkaloidal Drugs and Galenical Preparations," by C. Caspari and
- "A Microscopical and Analytical Study of Coca-leaves," by A. R. L. Dolime.
- "Refractometers and their Uses," by Professor W. F. Edwards.

SECTION OF LEGISLATION AND EDUCATION.

The following. amongst other papers, were contributed to this Section, which met on Thursday, August 17:-

- "Would it be a Gain or Loss to Pharmacists to Compel Apprentices to Pas a Board of Pharmacy Examination on their General Education before Permitting them to begin Work in the Drug-store?" by Rosa Upson, M.D.
- "What are the Benefits, and what, if any, the Losses to the Community and to Pharmacists by Reason of the Existence of Pharmacy Laws?' by S. A. D Sheppard.

Another on same subject, by H. M. Whitney.

- "Why do so many Pharmacists Forsake their Profession for the Study and Practice of Medicine?" by H. R. Slack, M.D.
- "More Chemistry Needed: a Plea for the Extension of this Branch of a Pharmacist's Training," by A. R. L. Dohme.
- "Should Candidates for Graduation in Pharmacy be able to make al Preparations a Process for which is given in the United States Pharma copœia?" by L. E. Sayre.
- "Should any Candidate be Permitted to Graduate in Pharmacy before he is able to apply the Tests and Assays of the United States Pharmacopæia?" by Dr. Wm. Simon.

The Association spent Wednesday at the World's Fair. A banquet, given by the druggists of Chicago, took place at the Casino in the evening. Covers were laid for 600.

During the evening the following toasts were responded to: - "The American Pharmaceutical Association," Professor J. P. Remington; "The International Pharmaceutical Congress," Michael Carteighe; "The Illinois Pharmaceutical Association," Dr. H. Lee Hatch; "The Pharmaceutical Schools," Professor A.B. Prescott; "The World's Columbian Exposition," Dr. Selim H. Peabody; "The Pharmaceutical Press," Dr. H. M. Whelpley; "The City of Chicago," Geo. P. Engelhard; "The Ladies," Professor C. S. N. Hallberg. Professor Remington acted as toastmaster.

The final session was held on Saturday, August 19, at 9 A.M.

COCAINE is a protoplasmic poison, and an anæsthetic to all kinds of animals, according to Danilewsky.

Legal Reports.

WELSH VINEGAR.

AT Swansea Police Court, on Saturday last, before Colonel Wright (in the chair), Mr. W. Williams, M.P., Dr. J. G. Hall, Messrs. W. Richards, Thomas Freeman, and Daniel Edwards, Elizabeth Lodwick, a grocer, of Gowerton, was charged, under the Sale of Food and Drugs Act, with selling as vinegar a liquid containing genuine vinegar 20 per cent., and diluted pyroligneous acid 80 per cent. Mr. Herbert Monger appeared for the prosecution, and Mr. Nicholson (Cardiff) defended.

Mr. Monger, in opening the case, explained what vinegar is, and referred to the Birmingham cases, being curious to know whether the arguments used there would be applied

in the present case.

Dr. W. Morgan, who analysed the vinegar, gave evidence in support of his certificate. The 80 per cent. pyroligneous acid contained in the fluid was certainly not vinegar, he said.

Mr. Nicholson said, in defence, that it was a puzzle to chemical science to define vinegar, and they consequently had recourse to the British Pharmacopæia, which defined vinegar as "an acid liquid prepared from a mixture of malted and unmalted grain by acetous fermentation." The only difference between acetic acid and pyroligneous acid, to take the extreme view, was that the latter was slightly contaminated with extraneous matter. In the event of the expert evidence which he was about to call conflicting with Dr. Morgan's evidence, he should ask to be allowed to avail himself of the section of the Act which enabled the Bench to transmit the sample to Somerset House, and on the result of that analysis he would stand or fall. The four points he should submit were: (1) That there was no impure acetic acid or pyroligneous acid in the sample; (2) that the pure acetic acid in the substance was of the quality suggested by the British Pharmacopœia; (3) that pure acetic acid was an essential part of vinegar, and was, in matter and in fact, generated in the process of its manufacture; and (4) that the sample was not injurious to health.

The defendant, Mrs. Lodwick; Mr. Samuel Chivers, of the firm of Messrs. S. Chivers & Co., Cardiff, the manufacturers of the vinegar in question; and Mr. Milton Beeney, foreman brewer in the employ of this firm, were then placed in the box, the two latter witnesses deposing to the manner in which the vinegar was prepared. Mr. Chivers admitted, in re-examination, that pyroligneous acid was

commonly used in making the vinegar.

Mr. Frederick Davis (described as a medical man at the London University), gave evidence of having made an analysis of a sample of the fluid. He found it contained 427 per cent of real acetic acid, but no pyroligneous acid, inasmuch as this acid was practically pure acetic acid. The sample was a thoroughly sound quality of vinegar.

Cross-examined by Mr. Monger: His sample was obtained

from Mr. Chivers, and not from the defendant.

The Chairman announced that the Bench had come to the conclusion that the so-called vinegar was not a vinegar according to the Act of Parliament, taking the evidence all Defendant would therefore be fined 1s. and costs, amounting to 2l. 18s. in all.

Mr. Nicholson applied for permission to state a case.

The Chairman: Oh, yes, certainly.
Replying to the Magistrates' Clerk (Mr. Jenkin Jones). Mr. Nicholson submitted that the point of law on which he asked for the case to be stated was that vinegar was asked for and vinegar was obtained.

The Magistrates' Clerk: That is no point of law. If you cannot get a better point than that, the Magistrates will pro-

bably decline to state a case.

Mr. Nicholson: Do I take it, then, that you refuse? The Magistrates' Clerk: Oh, no; but whenever you submit a point of law, I will submit it to the Bench to consider.

Mr. Nicholson: Very well.

The Court then rose.

AT Merthyr Police Court on Monday, Richard Casy, grocer, Caedraw, Merthyr, was summoned, under the Sale of Food and Drugs Act, for selling to Superintendent Thornley vinegar not of the nature, substance, and quality demanded by the purchaser. Mr. Nicholson, of Cardiff, appeared on behalf of Messrs. S. Chivers & Co., Cardiff, the manufacturers of the vinegar. The superintendent gave evidence as to the purchase of the vinegar, and produced Dr. Morgan's certificate, showing that the sample presented to him contained 20 per cent. of genuine vinegar and 80 per cent. of dilute pyroligneous acid. Mr. Nicholson submitted a defence similar to that in the above case.

Mr. Chivers was called to describe the process of manufacture. He explained that vinegar could not exist without acetic acid, and said that, when purified, pyroligneous acid became acetic acid. There was no acid added to the vinegar which he manufactured; it was all produced in the process

of fermentation.

Milton Beeney, foreman to Mr. Chivers, gave similar evidence. Mr. Frederick Davis, B.Sc. (now described as a teacher of science at South Kensington), said that pyroligneous acid and acetic acid, if pure, were precisely the same. He had analysed a sample of the vinegar, and had found it to contain a pure acetic acid of only a percentage of 4.53.

It was ultimately arranged that the sample kept by the superintendent should be sent to Somerset House for analysis by the Government authorities, and the case was adjourned for a month.

VINEGAR-PROSECUTIONS AT SHEFFIELD

AT Sheffield on Tuesday, the Corporation, through Mr. Sayer (Deputy Town Clerk), prosecuted several grocers and Mr. William Stevenson, chemist, 121 Langsett Road, for having sold vinegar which was not of the requisite strength.

Mr. A. Neal defended.

Mr. Sayer said in many similar cases throughout the country samples had been certified to consist of acetic acid, otherwise called pyroligneous acid, derived from the distillation of wood, diluted with water and coloured. The present cases differed from that. The Inspector had asked to be supplied with malt vinegar, whilst in the other cases vinegar only had been asked for. He submitted that malt vinegar should consist of a preparation produced by the fermentation of malt or unmalted grain, and that no other article would answer to the description of malt vinegar. It might be contended that as acetic acid formed the active essential of all vinegars, the preparation in question might be called vinegar. It would, however, be as reasonable to call a pre-paration of diluted acetic acid vinegar as to call a preparation of diluted alcohol wine because it had been flavoured and coloured in imitation of sherry or Burgundy. By the process of fermentation many valuable properties were comprised in good malt vinegar. which added not only to the aroma but to its appetising properties and wholesomeness. He did not say that the article complained of was deleterious to health; but he was advised that if taken to excess it would be more likely to produce indigestion and dyspepsia than pure malt vinegar.
Inspector W. H. Harrison deposed to the purchase of

vinegar from John Elliott, Sharrow Street.

Mr. A. H. Allen, city analyst, said the sample was a factitious article made in imitation of vinegar. It consisted essentially of acetic acid, derived from the distillation of wood, diluted with water and coloured. In addition, it was diluted with sulphuric acid in the proportion of 0.25 per cent. of its weight. The sample contained but a trifling propor-

tion of the article known as malt vinegar.

Mr. Neal, in defence, referred to the Birmingham appeal, and to the remarks of Mr. Dugdale in dismissing it, that the thing was extremely valuable in itself, and would find its place in commerce. In this case Mr. Neal said that what was sold was pure diluted acetic acid, coloured to imitate vinegar, and it was not deleterious to the public health. As to the sulphuric acid, the defendant knew nothing about the manufacture of the article. He bought it for pure malt vinegar and sold it as such. The manufacturer and his brewer were in court, and would swear that at their works no sulphuric acid was added; but it might have been included in the acetic acid which the manufacturer purchased. The manufacturer would in future have all his acetic acid tested, and would not again land his customers in difficulty.

A fresh label was being prepared, and no more would be heard of this article as a rival to vinegar. In this and three similar cases a fine of 10s., including costs, was imposed.

In three other eases the defendants urged that they bought

the article as pure malt vinegar and sold it as such.

The Bench fined Mr. Stevenson 1l. and eosts, saying he was an educated man and ought to have known the quality of the article he was selling. The other two were each fined 10s., including costs. Mr. Sayer said he had another ease against Boot's Pure Drug Company (Limited), but they had got a guarantee from the makers that the article was pure malt vinegar, and therefore he withdrew the summons.

ALLEGED COCOA FRAUD.

AT the Bow Street Police Court, on Monday, Edward Hughes, alias Charles Wood, commission agent, of 33 Elthorne Road, Holloway; Spencer Morris, alias William Cook, commission agent, of 21 St. Paul's Road, Tottenham; Thomas Waller, commercial traveller, of 2 Woodbine Terrace, Angel Road, Edmonton; and George Clarke, commercial traveller, of 46p Peabody Buildings, Essex Road, Islington, were charged on remand, before Mr. Lushington, with conspiring to obtain money by false pretences from divers persons with intent to cheat and defraud.

Mr. Blanchard Wontner prosecuted, and Mr. Edward Dell

defended Hughes.

Mr. Wontner said that the prosecutors were the wellknown firm of James Epps & Co., cocoa-manufacturers. Since the middle of July Messrs. Epps had received complaints respecting their cocoa from grocers on behalf of customers to whom it had been sold. The complaints were to the effect that the cocoa was inferior in quality. As a result of the complaints Messrs. Epps made investigations, and found that the cocoa complained of was not theirs at all, and that the label on the packets in which it was done up was a forgery, though it was a remarkably exact imitation. Further inquiries showed that a fraud had been going on to a large extent, and that three of the accused had been going about and offering what purported to be Epps's cocoa at somewhat reduced prices. It was said that they accounted for the reduction in price by stating that they were selling it for grocers who had failed or on account of a railway company having sold it off owing to the non-payment of their charges by consignees. The matter was placed in the hands of Inspector Baker, of the Criminal Investigation Department, who took great pains to trace it out. He found that Hughes, alias Wood, and Morris, alias Cook, were the principals, and that Waller and Clarke had been employed by them as travellers. He wished to withdraw the charge against Waller and Clarke, as it was evident that they were persons of respectable character and had been deceived by the other two prisoners as to the genuineness of the cocoa. With regard to Morris and Hughes, they had been connected for four or five years, and had traded as Ripley, Harper & Co. in Mark Lane, and as Walter Jamieson & Co. and the London Traders' Association at the Façade, Cloak Lane. At 21 St. Paul's Road the materials for carrying on the fraud had been found, and also invoices from Messrs. Collier at a lower price and goods of different quality to those of Messrs. Epps. He thought he would be able to show that the two prisoners, Hughes and Morris, had been engaged in a dangerous and ingenious conspiracy.

Waller and Clarke were discharged from custody.

Inspector Baker was examined, and said that after arresting Morris he searched an outhouse in the rear of the premises 21 St. Paul's Road. He found a bench with cocoadust on it, a zinc bath at the bottom of which was some cocoa, four wooden packing-moulds, four pieces of wood used with them, between one and two thousand labels with "James Epps & Co." on them, a packing-pestle, a pair of scales, some stencil-plates, ink, and paste-brushes, some thin brown paper corresponding to that in which the coeoa was done up, and two of Epps's cocoa-boxes. In a drawer in the kitchen he found invoices for 15 cwt. of coeoa from James Collier & Sons (Limited) to Mr. Morris, at an average price of 62s. 2d. per cwt. He found other invoices for Dunn & Hewitt's, cocoa, debited to the London Traders' Association, invoices for tinfoil debited by Betts & Co. to the East Lon-

don Packing Company, a number of price-lists headed "Walter Jamieson & Co., 4 The Façade, Cloak Lane," a number or invoices headed "Ripley, Harper & Co., 75 Mark Lane," a memorandum from Carter Bryant to Mr. T. Walter, a memorandum signed Ted Hughes from the London Traders' Association, 3 Cloak Lane, and a letter signed E. Hughes. The latter referred to calling at Collier's, and to a hundredweight being got ready. When arrested Hughes admitted that Waller had been deceived by him in the matter.

Sergeant Williamson, of Scotland Yard, gave evidence as to keeping observation on Hughes and Morris, and the arrest

of Hughes.

Thomas Waller was called as a witness, and said that he was a commercial traveller. He had known the prisoners three or four years, through answering an advertisement for a traveller. He had travelled for Hughes and for Morris since then, but lost sight of them till April last, when he met Hughes, who asked him if he wanted a commission, adding that he had about 5 cwt. of Epps's cocoa, and would give him 5 per cent. commission if he would sell it for him. witness asked if it was good stuff and new, and Hughes replied that it was, and that the boxes were all marked with the date on which they were put up, so there could be no deception. The witness asked the price he was to sell at, and was told 114s. per cwt. Hughes said it was not exactly his, but was to be sold for Ripley, Harper & Co., of Mark Lane, and that it was sold by the Great Western Railway Company, who had taken it for a grocer to Bristol, but as he had not paid the freight it was sold by the company to cover the charges. Witness sold 2 ewt. of it. Some time after Morris told him the cocoa was sold on his behalf.

Mr. Lushington remanded the prisoners, refusing to take

bail.

Bankrupteies and Fnilures.

Re STERILINE (LIMITED).

A MEETING of the creditors and shareholders of this company was held on August 24, before Mr. G. Stapylton Barnes, Official Receiver, at the Cary Street offices of the Board of Trade. The financial difficulties of the company have already been reported in this journal. Mr. Nicholson, the vendor and chairman of the company, was nominated for the post of liquidator, but a section of the creditors declaring in favour of the Official Receiver acting in that capacity, the matter will be taken before the High Court Judge, who will make the appointment in due course.

Re John Swift, 46 Marine Parade, Southend-on-Sea, Essex Druggist.

A STATEMENT of affairs has been lodged in regard to this failure. The gross liabilities are returned at 5381. 18s. 4d., of which 4991. 3s. 4d. is expected to rank. The assets are estimated by the debtor as follows:—Stock-in-trade, 251.; fixtures, fittings, &c., 201.; furniture, 451.; life-policies, 251. 12s.; book-debts, 81. 15s. 11d.; surplus from securities in the hands of creditors fully secured, 511.—total, 1751. 7s. 11d. Deduct creditors for rates, taxes, &c., 101. 15s. Net assets, 1641. 12s. 11d. The deficiency is thus 3341. 10s. 5d. The Assistant Official Receiver reports:—

The receiving order was made on July 29, 1893, on the debtor's own petition, and by an order of the Court made the same day the debtor was adjudged bankrupt. In the year 1884 the debtor purehased the business he now carries on from Mrs. King for 180% (stock, fixtures, and goodwill). He had no capital of his own, but borrowed 300%, which is still owing. He took the stock as it stood, no valuation being prepared, and he has continued to trade up to the present time in his own name, and without any further capital. The debtor has kept a day-book and daily takings and expenditure book. He has not kept a cash-book or a ledger. The books kept have not been balanced, no statement of his liabilities and assets or balance-sheets have been made out during the past three years; the debtor has not, therefore, kept such books of account as are usual and proper in the business carried on by him, and as would disclose his busi-

ness transactions and financial position during the past At the date of the receiving the lease of the debtor's premises was held by the creditor "fully secured," but it has since seen redeemed by the Official Receiver, he having obtained a purchaser for the business. The security held by the creditors partly secured consists of a policy on the life of the debtor, in the Scottish Widows' Fund, for 1001., effected in 1879. This is the policy referred to in the above summary, and which is estimated to produce 25%. 12%; but, inasmuch as the policy is held as security, there will be nothing therefrom for the unsecured creditors. On August 8 a preliminary meeting of the principal creditors was held at the Official Receiver's offices for the purpose of considering the best means of dealing with the estate, and, after some discussion, it was decided to carry on the business until the first meeting, and, in the meantime, the business to be advertised as a "going concern." This has been done, and, as previously stated, a purchaser has been found for the business. The debtor states that he first became aware of his insolvency about three years ago, and has contracted debts since that time, which are now owing, the only expectation he had of paying such debts being by either an increase in trade or a favourable sale of the business, and with this view he has continued to trade up to the present time. He attributes his present position to bad trade for the last two years, illness for nearly three months last year, want of capital, the calling-in of 100% (part of 300% advanced on commencing business), in respect of which a writ has been issued, and gave the following account of his deficiency: Bad debts, 4l. 18s. 6d.; household expenses of himself, wife, three children, and servant, 26l. 16s. 5d; insurance premiums, 491. 0s. 6d.; interest on money borrowed, 1671.; law expenses, 231.; loss through illness, 241.; depreciation of stock, &c., 39l. 15s.; total, 334l. 10s. 5d.

THE NEW DRINK-CURE.

"WITH regard to that drink business, I suppose?" queried Mr. Gliddon, cheerfully indicating assent to our representative's request for an interview. "With pleasure. Please take a seat while I fetch a few documents that may help to

convince you, a sceptic."

And Mr. Gliddon quitted the apartment, leaving his interviewer in the act of cudgelling his brains to fix the spot where he had met this tall, delicate, bright-whiskered gentleman before. Suddenly, from among a shadowy cloud of half-forgotten exhibitions and interviews, there dawned upon him the reminiscence of the identical gentleman, or someone as like unto him as one pea is to another, in charge of the Matter stall in the Agricultural Hall Chemists' Exhibition. When found, make a note of. And now our representative began to realise the connecting-links between the agent for the new drink-cure, whom he had come to interview, and Mr. W. T. Stead's letter in a recent issue of the Daily Chronicle, calling for half-a-dozen besotted boozers as experimental subjects for the practical investigation of a new cure for inebriety, in the efficacy of which the editor of the Review of Reviews is apparently a believer.

"STEADY, BOYS, STEADY."

Such a marked air of Steadism pervades the house in Pall Mall East, where Mr. Gliddon is located, that the visitor's eye almost mechanically searches the walls for pictures of the Tsar and Mr. Rhodes, and feels aggrieved at their absence. On the ground floor Count Mattei's remedies are sold, and it was in the elegant shop devoted to these harmless electricities that our interviewer found his subject. The first floor is Mr. Gliddon's private office. Here the click of the typewriter, the litter of journals, press-cuttings, reference-books, and correspondence, all hint of the birth-throes of the Limited Liability Company which may presently sweep dipsomania off the earth by the aid of the mighty South American Bitters. Well, Mr. Stead is known to have a fondness for companies blending commercialism with philanthropy, and so there need be no surprise that he should think well of the bitter-business. Higher up in the building are the offices of Borderland, the official organ of Spookdom, and the remainder of the house appears to be used as

a general West-end depôt of the Review of Reviews.

It should be explained, however, that Mr. Gliddon does not claim any connection with Mr. Stead and his works excepting as that of landlord and tenant, the drink-cure agent being apparently the lessee of the building in which Count Mattei's agents and Mr. W. T. Stead have chanced to take offices.

And this is the story which Mr. Gliddon, whom we may describe as the impresario of the drink-curist, unfolded to our representative :-

"ANOTHER STRANGE STORY OF TO-DAY."

"A few months back a gentleman called at this house tosee an acquaintance of his upstairs [pointing towards Spookland]. The person wanted happened to be out, and when the caller came downstairs he saw me, and engaged in some casual talk. He had run an adventurous career in South America, had been a drink-soaked dipsomaniac for years, and was providentially cured of his craving by a marvellous Indian remedy. Acquaintance ripened from this conversation, and although Mr. Edwards (that was the caller's name) had apparently no notion of putting his cure to professional use, I became so impressed with the idea of its genuineness that I determined to see what could be done with it. The more so as I am a fanatical teetotaler. A fanatical one, reiterated Mr. Gliddon, with a look as if he would checrfully mount the faggot as a martyr to the anti-drink bitters.

Mr. Edwards (there is no reason to withhold his name, since it is already published, with much of his family history, in a small pamphlet of which Mr. Gliddon handed our representative a copy) is the son of an officer in the British army, and had the misfortune to contract drinking habits in his childhood. A bulky manuscript containing the biography of the gentleman in question was among the documents brought into the room by Mr. Gliddon, and from it he traced the career of the possessor of the cure onwards from 1871, the year in which young Edwards first landed in Uruguay.

Edwards's chief devotion upon setting foot in the New World appears to have been to the flowing bowl. Fortunately, the next revolution came around soon after his arrival. Perhaps the Uruguayan President of the day had been trying to rob the poor man of his beer, or its equivalent. Anyhow, Edwards declared himself "agin the Guver'mint," and joined the rebels, who were defeated in due course. Then followed an engagement with the Transandine Railway expedition, a summer at the Bolivian silver-mines, a two-years' captivity with the Catirel Indians, and similar incidents of a South American vagrant's existence. All through these yearsthe drink-fiend's clammy claw kept a tight grip on the man; nor could he shake it off during his return to England in 1876, his career as a mounted trooper in the Zulu, Basuto, and Transvaal wars, and his second expedition to the almostunknown falls of the Paraná river, in the forests of Eastern Paraguay, as a diamond and emerald prospector. Whereverhe landed he was, as the biography naïvely put it, "kicked out through grog.

A MEDICINE-MAN'S TOUCHING GRATITUDE.

The year 1888 again found poor drink-sodden Edwards an outcast of civilisation, collecting Paraguay tea near the Paraná Falls, and temporarily gaining Nirvana whenever palm-wine was handy. One day he witnessed half-a-dozen Indians maltreating an old tribesman—("Edwards gave me his name," soliloquised Mr. Gliddon, "but I couldn't spell it anyhow")—whom he saved by timely intervention. The ancient party turned out to be the medicine-man of the tribe -("an hereditary office, we may assume," was Mr. Gliddon's comment)—and soon became so chummy with Edwards that the two established fellowship in the orthodox way by the transfusion of blood. One day the medicine-man, having noticed Edwards's failing brought him a gourd of brown liquid, imploring him to take some of it, as it would cure him. The bowl remained untouched for four days, at the end of which Edwards decided to try the remedy, with the result that, after going through the tedious and lengthy process of treatment which it involves, the Englishman was cured completely of his drinking habits. Shortly afterwards Mr. Edwards became desirous of again making his way to the coast, and with great difficulty persuaded the medicine-man to confide to him the secret of the manufacture of the drink-cure. Assuming that Mr. Edwards had no thought whatever at the time of making any further use of the remedy, his request was certainly a remarkably happy Upon his return to Argentina, our hero inspiration. treated, and apparently cured, a man who had been sent to South America by Messrs. Bell & Co., a Liverpool mercantile firm, as well as several others. Last winter Edwards took ship home from Buenos Ayres, apparently carrying a supply of the remedy with him, and was welcomed by his delighted relatives as becomes a reformed character in the possession of a secret big with potential wealth. So far the story of Mr. Edwards, which is quite on all-fours with the careers of the heroes of many conventional "books of travel and adventure." When he had listened to it all, our representative thought he would like to know a little more about the remedy itself, and prepared to frame questions accordingly. But Mr. Gliddon was not yet at an end.

THE "BITTERS."

"One moment," said he, "while I show you these letters from various provincial medical men, merchants, and other persons of standing, vouching for the fact that they are personally acquainted with confirmed drunkards who have been cured by Mr. Edwards." It was a big pile of letters, but the C. & D. man struggled through them to the end, and then asked what Mr. Edwards intended doing now that the cure he had been so modestly practising by stealth had suddenly burst into fame?

"We don't quite know, yet," was the answer. "Perhaps we shall start it as a limited company, but it may be that Mr. Edwards will decide to keep the administration of it entirely in his own hands, and will open a kind of home for the treatment of patients.'

"Have you any of the medicine here?"
"Oh, yes; I keep it upstairs in bulk. The whole of the stock is there"—and Mr. Gliddon brought forth a glass bottle containing a syrupy brown alcoholic liquid, resembling Peruvian balsam in appearance, and to some extent in aroma. "We have called it 'Yguazu Bitters.' It has been analysed by Mr. Stokes, who declares it to contain 52 25 per cent. by weight of water, 36.55 per cent. of alcohol, and 11.20 per cent. of a vegetable extract containing an undetermined alkaloid. We guarantee that it does not contain any poison whatever. It is exceedingly disagreeable to take, and the peculiarity of the treatment is that for the first three days the patient must take a teaspoonful of it every three hours, day and night. Should the drink-craving come on between the doses, the lips should be moistened with the extract. After the first three days the doses are diminished. The whole treatment lasts about a month, and is, so far as we can judge, final. Mr. Edwards was treated several years ago, and has never been able to bear the smell or taste of alcohol since. Even the flavour of a jelly made with spirit produces nausea

"Can you give me any information concerning the ingredients and the preparation of the remedy, and can I obtain a

"For the present we do not want to let any of the drug go out of our hands, and I must therefore decline to let you have a sample," said Mr. Gliddon. "Besides," he added, shrewdly, "you only want it for analysis, I suppose, and we are not anxious to have people try what it is made of. The remedy consists of three drugs. Two of them are fairly well known in this country, the third is exceedingly scarce. I cannot give their names. Mr. Edwards is the only man who possesses the secret of the preparation."

"One of the drugs being so very scarce, and obtainable only in an almost inaccessible part of the world, how will you secure a sufficient supply for the manufacture of the

remedy on a large scale?"

"Arrangements will be made," was the oracular reply, and beyond that Mr. Gliddon declined to go.

SELECTING THE "CORPORA VILIA."

"And now," said he, as our interviewer prepared to leave, "I am am just about to go to Mr. Stead to select, with him, the six most promising cases out of the hundreds of answers that have come in reply to Mr. Stead's letter in the *Chronicle*." I should like to taste a little of the remedy," said our

man. Mr. Gliddon poured out the dose, and after swallowing a teaspoonful of one of the most bitter, nauseous compounds he has ever tasted, our representative made his way back. mentally comparing what he had heard with the histories of other patent medicines as told by their introducers, from the American sarsaparilla-men to the philanthropic exmissionary from New Mexico, who supplies trusting sufferers, apparently disinterestedly, with a prescription containing a large number of ingredients, of which one turns out to be procurable only from himself. It may be of course, that Mr. Edwards's bitters will prove all that its sponsors allege it to be. Fact is often stranger than fiction. There is no affectation of philanthropy about this business, and, so far as we can judge, any sufferers (except the six experimental ones) who submit themselves to Mr. Edwards will find that his idea of relationship between himself and his patients is based upon the cash-nexus principle pure and simple. For an unsophisticated wanderer, Mr. Edwards has certainly shown remarkable smartness in possessing himself of the medicine-man's secret. The least he can do, surely, will be to engage that gentleman, should he still remain intact, at a handsome salary, to assist, in native costume (decorum permitting), at the cures.

" YGUAZU."

Strange to say, comparatively few drugs come to us from that district of South America where Mr. Edwards is said to have obtained his cure. Paraguay teems with medicinal substances used by the natives, but, up to the present, scarcely any of these have come into European commerce. "Yguazú," the name of the bitters, appears to be a compound of two common words of the native (Guanahi) language. In the catalogue of Paraguayan exhibits at the Paris Exhibition, which our representative looked up after the interview, the word "guazú" occurs continually among the native names for drugs. It is applied, among others, to medicines derived from Styrax reticulatum, Psidium pomiferum, Pilocarpus Sellonii [l Selloanus], Palopisma longifolium, Lypia geminata, Jacaranda species, Urera grandifolia, and Polycarpus. It is, of course, as likely as not that the name is simply a fancy one, and that the drugs. when once a curebusiness is soundly established, may prove to be much more easily procurable than is at present anticipated. There is also a River Yguazú near the Paraná Falls, where the cure is said to have been discovered.

Trade Hotes.

MESSES. FORD, SHAPLAND & Co. send us samples of some very pretty calendars and useful almanacks which they now have ready for 1894, and only wait for chemists' instructions before filling in the numerous blank pages reserved for "own advertisements." The firm will send samples to any who ask for them.

WHEN our Chicago Exhibition representative visited Philadelphia in May last, he learnt from Messrs. Wm. R. Warner & Co. that they were preparing a series of effervescent tablets, comprising some of the most useful medicines capable of being put up in that form. Samples of Vichy and lithia tablets which we have now received from their agents, Messrs. F. Newbery & Sons, King Edward Street, E.C., show us that these are now available for the English trade. These tablets are an exceedingly portable form of medication, and they afford a ready means of preparing waters similar in properties to natural mineral waters. We have also received a sample of a new pill-pil. cascara cathartic (Dr. Hinkle)the composition of which shows it to be intended for chronic constipation due to torpidity of the intestinal coating. The pills are pink, sugar-coated.

DEATH.

DICK.—At Ukambani, East Africa, on July 18, of fever, in his thirty-first year, David Laing Dick, chemist and druggist, late of 557 Sauchiehall Street, Glasgow.

PHARMACY AT THE CAPE.

A CAPE TOWN CORRESPONDENT, who thinks that assistants at home are chary about taking situations out at the Cape, says that Cape Town, the seat of the Cape Colonial Government, is not behind the times as far as pharmaey is concerned. There are several splendid shops in the town, and the style of business of the leading firms, in retail and dis-

pensing, is distinctly of a good class.

There are many medical men (not forgetting one lady practitioner) well qualified, several being graduates in medicine and surgery. All prescriptions are sent to the chemists, consequently there is much more dispensing than there would be in a town of the same size in England. The proprietaries popular in England are largely sold, and also some of the well-known American and French specialities. In some of the stores (the word shop is unknown in this part of the world), a considerable trade is done in Dutch medicines, which are said to be compounded from prescriptions originally brought from Holland. Many bear a strong re-semblance to our B.P. preparations. Their names, when pronounced with the Cape Dutch accent, have a very curious sound in the ears of a new-comer. However, these medicines are as familiar as household words amongst many of the oldfashioned Dutch people, for next to his Bible, in which the Dutchman has such steadfast faith, come these remedies; and frequently it falls to the lot of an assistant to take orders for dozens at a time.

Often there are up-country expeditions to be fitted out, principally with Burroughs & Wellcome's tabloids, which

are held in high esteem.

Remedies for rheumatism and neuralgia are in great demand. The prevalence of these diseases is probably due to the large quantity of meat consumed, and to a diluted malarial influence.

THE CUSTOMERS

are mostly English and Dutch. As it is rare to meet an educated Dutchman who cannot speak some English, there is little or no language difficulty. They read carefully the papers and magazines, which are excellent mediums for advertising in the colony, arriving by the weekly mails, and eagerly seek after the latest novelties as much as in the Old World.

ASSISTANTS.

if qualified, are well paid. Salaries range from 121. to 151. monthly, with a bedroom provided and a passage paid out. The cost of living at the best boarding-houses never exceeds 41. 10s. per month. Generally speaking the hours of business are from 8 A.M. to 6 P.M., with alternate evening duty and Saturday afternoon and Sunday duty. It is not customary to give an annual holiday, because there are few places worth visiting, and travelling is very costly. The climate, especially in the winter, is grand, and very suitable for Europeans.

There are not many opportunities of intellectual improvement, but, on the other hand, there is plenty of rowing, tennis, cricket, and football.

The Colonial Pharmacy Board examines candidates quarterly, in much the same way as they are examined in the Minor, though there is much less practical work. There

is no qualification granted equivalent to the Major.

A Minor or Major man in order to be registered in the Colony has to submit his certificate to the Pharmacy Board, which recommends the Government to grant Mr. Blank a licence to practise as a chemist and druggist. For this 50s. is charged.

Personalities.

Mr. James Terence Conroy, B.Se., Liverpool, has obtained a renewal of his Exhibition Science Scholarship.

MR. FRANK CLARKE informs us that it was not he, but, he believes, Mr. Herbert Clark, who sang "My Queen" with much acceptance at the Conference smoking-concert.

MR. THOS. R. CARSWELL, who communicated a long paper to the British Pharmaceutical Conference last year on "The Estimation of Phenol," is now following it up by one contributed to the Chemical News on "The Action of Iodine on some Phenols and Allied Compounds in Presence of Free

Alkali, and a New Class of Derivatives Resulting therefrom

MR. WILLIAM KILNER, whose death we announced last week, was born at Hunslet, near Leeds, in 1826. A few years later, with his father and family, he moved to Castleford, and when he was 8 years of age he commenced to work at glassbottle making, his father's trade, which he followed all his life. In 1844 his father moved to Thornhill Lees and founded the house of John Kilner. For some years John did his own travelling, in those days largely by coach. Later his son William travelled for the house, and was well known to most of the leading bottle-buyers of that day. John Kilner died in 1857, and his four sons. Caleb, George, William, and John, then carried on the business under the name of Kilner Brothers, as known at the present day. The London branch was started in 1850 under the management of Caleb, the eldest son, who later retired owing to bad health. Then William came to London in 1864, and from then until a few months ago had taken an active part in the management of the



London house, being assisted latterly by his eldest son George W. Kilner, and still later by two younger sons. The youngest brother (John) of the senior branch of the family retired from the firm several years ago, while the elder George survives. He is located at the works, being assisted in the manufacturing by his sons. The late Mr. William Kilner usually enjoyed good health, which enabled him to-pay close attention to business. Recently lung and liver troubles arose, but with few breaks he kept up attendance for a portion of each day at business until seven weeks ago, when he went to Clacton to recruit. The change seemed todo him good, but he took a turn for the worse on August 13, and came home on the following Tuesday, and from Wednesday evening he sank rapidly, and passed quietly away on the Thursday evening. As mentioned last week,
Mr. Kilner was a prominent member of the Wesleyan Church, and for over fifty years was a staunch teetotaller. He was noted for his punctual and attentive business habits, and was strictly straightforward and upright in all his dealings. Few in the position which he occupied had such intimate acquaintance with the conditions and history of the glass-trade, and he had a vivid remembrance of the time when the duty on glass caused the periodical visits of the exciseman to the works. The great bulk of the bottle-trade of the present day developed during his lifetime. Mr. Kilner has left a widow, five sons, and a daughter. As has already been mentioned, three of the sons are in the business

KINGZETT'S PATENT

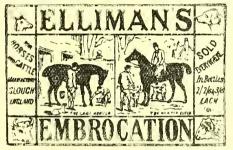
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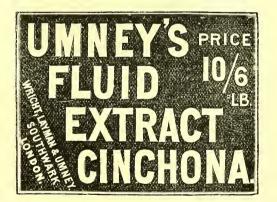


See first page, inside of front cover, of this issue, for latest particulars.

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2, Place Vendôme, Corner of rue St-Honore would undertake one or two additional agencies for patent Medicines, Sundries, etc. Special connexion amongst Doctors in Paris & Provinces.

IMPORTANT TO CHEMISTS.

See page 43 (bottom folio).

EVANS, SONS & CO., LIVERPOOL. EVANS, LESCHER & WEBB, LONDON. 1 Savaresse's Sandal Wood Oil Capsules are now in White Enamelled Metal Boxes.

INFANTS & INVALIDS.

Press and

FLETCHER'S CONCENTRATED LIQUORS are a very distinct advance in pharmacy, and incomparably superior to the one to seven infusions, which did so much to bring concentrated preparations into disrepute. No physician need hesitate to prescribe infusions made from these Liquors. They are indistinguishable from the most CAREFULLY PREPARED OF THE FRESH PREPARATIONS, AND THEIR EQUAL IN POTENCY."

Editorial Comments.

AMERICAN PHARMACY.

THE pharmaceutical meetings at Chicago, which came to an end last Friday, are fairly entitled to rank amongst the most notable gatherings which have ever been held in connection with pharmacy. As yet, we cannot speak of the International Pharmaceutical Congress, for our detailed reports of the proceedings thereat have not reached us; but the report which we print to day of the American Pharmaceutical Association meeting shows that body to be in a highly-vigorous condition, and, under the presidency of Professor Remiugton (one of the most popular pharmacists in the United States), a volume of work was transacted of which any organisation might be proud. The majority of the papers presented to the scientific section of the Association were distinctly above the average, and there were several topics brought before the education and legislation section which may be profitable beyond the locality to which they immediately apply. We hope to deal with some of these communications later on

It is in a sense gratifying to British pharmacists that the President of the Pharmaceutical Society of Great Britain was present at the meeting, to join in the sympathetic expressions of regret which the Association made towards Professor J. M. Maisch, its permanent secretary, who is this year made the sixth recipient of the Hanbury Mcdal, but was unable personally to receive the honour, owing to the serious, and, we fear, hopeless, illness from which he is suffering. Few but Americans can appreciate what Professor Maisch has done for American pharmacy in his character as an educationalist, organiser, and student. He has been greatly instrumental in building up the largest college of pharmacy in the world, has been the backbone of the American Pharmaceutical Association for many years, giving it tone when it sadly wanted it, and has enriched materia medica by his discoveries and observations. While it was fitting that one of his colleagues should be the first to voice the sympathy of his American confreres, it was also appropriate that Mr. Carteighe should have been present at the time as a messenger conveying a high honour to the sick Professor.

We naturally turn from this element of sadness in the meeting to the principal features of it presented in our report. Professor Remington found an agreeable subject for his address in the United States Pharmacopæia. Strange to say, the President of the British Pharmaceutical Conference ot 1885 (Mr. J. B. Stephenson) did the same for the edition of the British Pharmacopæia then just published; but he was more critical than Professor Remington, who, as one of the Pharmacopeia Committee, was able to speak of the principles which guided the members of the committee in their labours. We have already had the opportunity of commenting upon the new edition, and need only repeat that it sets up a standard of progress which will be of benefit to pharmacists of all countries. Mr. Carteighe, in one of his characteristic speeches, assured the Association that American and English pharmacists represent pharmacy differently and distinctly from the way it is represented in Europe generally, where pharmacy is more or less under the patronage of Governments. America and England are alike in being free from State control of pharmacies, and it is to the benefit of pharmacists that they themselves are the initiators of all movements for the betterment of their calling. Mr. Carteighe's speech sounds like an exported one, for he has freely used at home the same arguments in regard to education being the foundation of pharmaceutical progress as he did at Chicago; but they are quite applicable to the United States. The best part of American pharmacy is so good that its exponents in these higher ranks are apt to overlook the needs of their less ambitious brethren, so that such reminders as Mr. Carteighe's are needful.

In connection with this matter we call attention to a letter from Mr. S. P. Smith, an American pharmacist, which we

print in this issue. This letter is a reply to recent observations which we have made on the conditions of American pharmacy. With much that Mr. Smith writes we agree, for we are with him in respect for the higher branches of pharmacy in his country—in no degree inferior to the best conditions in Europe. Our object was to show that there is in the United States a substratum, and that a large one, in the drug-trade which is not creditable to the position which American pharmacy occupies in the professional sense. We endeavoured to show that this can be remedied by requiring of all who enter the trade a certain standard of elementary education (at present not required in auy State), as being the best foundation for professional education. This is the view held by the leading educationalists in America, and Professor Remington and Mr. Carteighe appear to have upheld it at the meeting of the American Pharmaceutical Association.

INFLUENZA.

As good a proof as could be desired of the statement, made last week when reviewing a "History of Medicine," that we have derived little practical knowledge from early medical authors is afforded in the epidemics of influenza which have afflicted us, in common with the rest of mankind, during the past three years. The first of these epidemics broke out in England late in 1889, and it found our medical profession comparatively ignorant of the nature of the disease and rationale of treatment. Forty years had elapsed since a similar epidemic had visited our shores, and few could recall much about influenza further than that it spread rapidly, and that the customary treatment of a catarrh was the course to adopt with individual cases. All this is brought home to us forcibly in the report on epidemic influenza of 1889-92, which Dr. H. Franklin Parsons, one of the medical officers of the Local Government Board, has prepared and submitted to his Department. This is Dr. Parsons's second report, the first one having been published in 1891. We commented upon it at the time, and it may be recalled that the chief point in the report was the proof that influenza is contagious, and is not caused by any peculiar condition of the atmosphere.

In the present report, Dr. Parsons continues his study of official statistics, and this is supplemented by a report of a bacteriological research by Dr. Klein. Considered as a whole, there is not much that is new in the reports, and we have the same objection to Dr. Parsons's one that we expressed two years ago-viz., that he takes no cognizance of the methods of treatment which have been employed during the epidemics. Incidentally, symptoms are described, the duration of the disease, sequelæ, and so forth, but nothing about treatment. We are aware that it is the Medical Department's purpose to advise in regard to the prevention of disease rather than its treatment, but a chapter in the report dealing with this branch of the subject would have been of historical importance, if not of immediate value, and it could not have offended the tenderest medical conscience. Such lessons as the report conveys deserve attention, however, especially since the opinion is strongly expressed in it that we have not vet got rid of the influenza-poison.

Dr. Parsons has obtained his facts from registration returns and special reports communicated to him by medical officers of health and others. One of the most interesting facts brought out early by the examination of statistics (which mainly refer to deaths) is that males are more liable to the disease than females. It is further shown that it is more fatal to the old than to the young, and that the death-rate is higher in country districts than in towns. Of persons above 65 who have succumbed, a greater proportion of

females appears in the returns, but this is explained by the fact that more females than males survive to the later ages of life. The figures in regard to deaths between the ages of 25 and 65 are striking. They are for England and Wales, and the year 1890, when 2,415 males and 2,108 females died from influenza. They are as follows:—

	-		20	25	35	45	55	65
Males Females	**	 	107 79	250 203	345 227	357 246	382 282	305 361

It is not difficult to account for this difference when we consider that the disease is readily communicable from person to person, that men, as the wage-earners, were eager to return to work as soon as the grave symptoms subsided, or even continued their work while the attack lasted, whereby liability to a fatal issue was greatly augmented. Then, as to the greater fatality in rural districts, it is explained that this is really a question of age; for there is a larger proportion of elderly people in such districts than in towns, where workers must be young and vigorous. It might be supposed that climatic conditions may have influenced the epidemic, but if there is anything in the report that is conclusive, it is that neither cold nor humidity affected the matter in the least, while the second epidemic compelled medical practitioners to regard the discase as contagious, and the proofs of this which have accumulated are overwhelming. A great part of Dr. Parsons's report is taken up with this aspect of the subject, and he has apparently endeavoured to ascertain the media of contagion, but nothing very definite has come out of this line of inquiry. In association with Dr. Klein's bacteriological report, however, we get something more conclusive out of the inquiry. Dr. Klein confirms Pfeiffer and Kitisato's discovery of a specific influenza-bacillus. In quite recent acute cases of the disease he found the bacillus in the blood of the patients, but it disappears very rapidly-killed by the fever, as it were-and nothing remains but débris to show that the blood has ever been infected with a foreign organism. But there is no relief for the patient, as the bacilli find a resting-place in the bronchi, where the morbid processes begin, and the sputum and even the fluids of the mouth swarm with them. Still, Dr. Klein throws some doubt on the specific character of this bacillus of Pfeiffer's. "What we now most especially want," he says, "for the demonstration of this bacillus as the materies of influenza is evidence that this particular microbe does not occur in any other disease than influenza; and Pfeiffer and Kitisato would go so far as to assert this as a fact. Our own researches have not led us to doubt it; and we have only to give the obvious caution that not sufficient time has yet elapsed since Pfeiffer's discovery and identification of the microbe to establish their assertion: and perhaps we are as yet hardly safe in denying the presence of his bacillus elsewhere than in influenza."

It is, perhaps, a pity that the discovery of the microbe is accredited to Pfeiffer, but since "knowledge is of things we see," it is fair to say that the Pfeiffer bacillus is the influenza-bacillus, sufficient in itself to account for the initiatory symptoms of the disease, and so destructive of the bronchi as to leave them open to inflammatory and pneumonic attack. Because Dr. Klein has tried to reproduce the disease by inoculation in 30 rabbits and 18 monkeys, and only succeeded in getting one monkey to catch anything like the "grip," we are not to conclude that the bacillus is harmless, but that these animals are immune to it. After Dr. Klein had experimented upon the monkeys, he discovered that there had been no influenza amongst the dwellers in the

monkey-house at the Zoo. "It can hardly be supposed that if monkeys were, as a class, susceptible to the infection of human influenza, the creatures living in the monkey-house, frequented by many thousands of people a month, while influenza was abundant in the London population, would have kept free from the complaint. And from the general experience of the Gardens of the Zoological Society, it would appear that few mammalia can share with the human subject a susceptibility to epidemic influenza. At all events, few of them are liable to receive the infection by the method which habitually obtains in man—through the respiratory passages." Dr. Parsons and Dr. Klein agree that the "pink-eye" of horses is not the same disease as human influenza.

The practical conclusions of the inquiry are extremely meagre, and consist chiefly in fresh proof of what has been known before. The bacillus does not live long after exposure to the air, therefore, says the report, free ventilation of apartments should be encouraged before influenza comes into a household. Since the mouth-secretions contain the infective material, they should be disinfected, and it will be advisable for those afflicted to blow their noses with pieces of rag or paper, burning these immediately. Had any other than a Government Department concentrated the results of a scientific inquiry in these pregnant precautions we might have smiled, but now, as it is, we must look wise and allow the British public to pay for its science.

CHEMISTS AND THE CENSUS.

THE third of the bulky volumes embodying the detailed results of the census of 1891 has just been issued from the press. It contains particulars concerning the ages, condition as to marriage, occupations, birthplaces, and infirmities of the 29,002,525 persons who constituted the total population of England and Wales on the night of March 31, 1891. Of this number, 14,052,901 were males, and 14,949,624 females. The singular fact that longevity is much more common among women than it is among men receives fresh support from the figures, which show that, whereas the numbers of males and of females in the ages from childhood to adolescence are almost equal, the excess in numbers of adult women over adult men grows larger with every five-years' age division. For instance, the number of males under 5 is 1,767,562, of females, 1,785,928; in the ages of 30 to 35 the figures are 977,870 and 1,049,599; from 70 to 75, 185,221 and 232,693; and from 90 to 100, 2,970 and 6,069; while only 42 males, as compared with 104 females, are returned as having reached 100 years or more.

The occupations of the people, to the classification of which the greater portion of the volume is devoted, are not, in our opinion, distinguished with sufficient clearness. The difficulty of the Census Commissioners in classifying the "occupation" returns has, no doubt, been very considerable, for thousands of persons must have filled in this section of their schedule in a manner which rendered it difficult to bring them under one of the comparatively few common denominators which it is possible to recognise in a volume dealing with thirty millions of people, even though it numbers nearly 600 foolscap pages. Still, the perplexity of the English Commissioners can have been only child's play compared to that of their Indian colleagues, who recently had to deal with a population ten times as large as that of Britain, and with many thousands more occupations.

At any rate, so far as concerns the large and deserving class of persons whose vocations are connected in some way or another with pharmacy or chemistry, the census returns cannot be said to shed much light. The system upon which the Commissioners have gone to work consists in the division

of the population over 10 years of age into six principal classes: the professional, numbering 926,132; the domestic, 1,900,328; the commercial, 1,399,735; the agricultural and fishing, 1,336,945; the industrial, 7,336,344; and the unoccupied, 9,154,373.

It must not be inferred from the largeness of the figures in the last-named section that two-fifths of the population of this island are just loafing their time away. On the contrary, $7\frac{1}{2}$ of the nine millions odd are women of various ages, by far the larger number of whom are engaged in household duties that might seem the hardest of all labour to a briefless barrister in Class I.

"Chemists," in spite of all the polite assurances of distinguished visitors at pharmacy dinners, are not counted among the "professional class" by the census-compilers. The "medical profession," is, of course, and it is interesting to read that no less than 85,235 persons are connected with it. This total is made up as follows (M indicating male, F female):—Physicians, surgeons, general practitioners, M 18,936, F 101; dentist, dental-apparatus maker, M 4,628, F 345 (in another part of the returns we find 2,036 persons named as connected with the manufacture of surgical instruments, to which, apparently, "dental apparatus" does not belong)—veterinary surgeon, M 3,191, F 2; sick-nurse, midwife, invalid-attendant, M 601, F 53,072; subordinate medical service, M 3,487, F 887. Photographers, classed as "artists," number 10,571.

Persons connected with "chemicals and compounds" are comprised in the fourteenth section of the industrial class. They are divided in three subsections, viz:—(A) Colouring matter: dye, paint, ink, blacking manufacture, M 3,938, F 607; (B) explosives, M 3,087, F 3,535: (C) Drugs and other chemicals and compounds, M 41,522, F 3,358. The lastmentioned sub-section is the kernel of pharmaceutical interest in the book. It enumerates as "chemist, druggist" (sic) 20,590 males and 1,340 females; as "manufacturing chemist, alkali manufacture," 19,708 males and 1,775 females; and as "drysalter," 1,224 males and 243 females. These figures include all persons in business for themselves, as well as all their employés. Thus we find under the heading "chemist and druggist" 5,354 persons (including 160 females) returned as employers; 12,916 (including 982 females) as "employed"; 2,282 (including 110 females) as "working on own account"; and 1,378 (including 88 females) as "others." The Commissioners appear to have regarded as "working on" own account" all chemists keeping shop without an assistant, while "employers" seems to refer to those who do not work single-handed. The large number of "others" is puzzling. These 1,378 persons cannot be all temporarily unemployed. The "chemist, druggist" class musters 8,049 persons under 20, and 793 of over 65 years of age. Of "manufacturing chemists and alkali-manufacturers "-a class which appears to include everyone, from the highly-trained scientist in charge of a factory to the man who trundles a wheelbarrow through the works—1,131 are employers, 19,410 employed, and 2,382 "working on their own account."

With respect to geographical distribution, the returns divide England and Wales into six districts. Of these, London contains 4,668 "chemists and druggists," 2,178 "manufacturing chemists and alkali manufacturers," and 155 "drysalters." In the West of England these classes number respectively 929, 103, and 13; in the North, 1,439, 484, and 58; in the central portion, 377, 188, and 10; in the East, 491, 565, and 31; and in the South, 1,432, 833, and 43. The Midlands, it would seem, are strangely under-supplied with pharmacists in comparison with London and the South of England. The proportion of employers and employed in the various divisions of the country, on which it w uld have

been interesting to have some information, cannot be traced from the returns. On the other hand, we are afforded information concerning the proportion of "European forcigners" (meaning thereby persons born outside the United Kingdom and not naturalised) who get their living in connection with drugs and chemicals. There are, it seems, 9 Russians, 1 Russian Pole, 3 Swedes, 2 Danes, 5 Dutchmen, 2 Belgians, 28 Frenchmen, 57 Germans, 10 Austrians, 1 Hungarian, 12 Swiss, 2 Spaniards, 6 Italians, 1 Roumanian, and 3 Turks connected with pharmacy in some way or another in this country. In manufacturing chemistry and the alkalitrade 224 foreigners are engaged, Germans and Russian Poles each numbering over one-third of cach. The drysaltery trade is a much more British one, only 12 foreigners being returned as connected with it.

THE CORDITE SCANDAL.

Questions continue to be put to the Secretary of State for War in regard to Sir Frederick Abel's connection with cordite, but these do not seem to advance matters much. On Monday Mr. Campbell Bannerman admitted that a memorandum which the Committee on Explosives, on August 20, 1888, forwarded to the Director of Artillery, and which the Times printed "by request" last week, was not published at the request of the War Office. Sir F. Abel asked him if he had any objections to sending it to the Press, and Mr. Bannerman replied that he had none. The Times of Tuesday contains a leaded article on cordite, from a correspondent, in which the interests of taxpayers are in delightful simplicity played against the attack on Sir F. Abel. article may be regarded as a supplement to the communication of last week. It begins with the following interesting statement :-

In the ordinary leisurely course of law an action will come before the Court some time in the autumn, in which a powerful and wealthy combination of manufacturers of nitro-glycerine, dynamite, and smokeless powders will seek to have it declared that patents held by them are infringed by the process now employed by the Government for the production of the explosive used by the army and navy. That explosive is known as cordite, and the process by which it is manufactured was invented by Sir Frederick Abel and Professor Dewar. It was patented by them, and the patent, so far as this country is concerned, was immediately assigned by them to the Secretary of State for War, they being bound to defend it whenever and however its validity might be impeached. The patent, in other words, is the property of the British public, and any attack upon it means ultimately an attack upon the public purse. If the plaintiffs in the pending action can make out their case, they will reeeive, either immediately or during the years that their patents have to run, at least half a million, and in all probability a great deal more, of the taxpayers' money. This is a large sum, and one well worth fighting for. The dynamite combination is both wealthy and influential. It can bring very considerable political pressure to bear upon the present Government, it has fast friends in high political and official positions, it is sparing neither pains nor money to enlist scientific witnesses and even Government officials on its side, and, in short, it is leaving nothing undone that can in any way further the grand aim of depleting the public purse to the amount just mentioned.

It is stated that this lawsuit will affect the public purse to the extent of any sum from half a million to a million, and with that to the front, and terrifying the taxpayer, the writer of the article proceeds to defend Sir F. Abel and Professor Dewar. This is done in a business-like way, and it is fair to these gentlemen that it should be stated that "the ingredients and the mode of manufacturing cordite were open to everybody who can read a specification from the day the patent was granted. A subsidiary patent for giving the explosive

a particular form was nominally sealed for two years,' Further, "It may be stated, on the authority of the assignee of the foreign patents, that the price paid was the amount of the patent-agent's bill, plus 100l. for personal disbursements by the patentees in connection therewith; and that the total paid for royalty up to the beginning of the present year is \$22l."

THE "SUMMER ISSUE" SUPPLEMENTS.
RESULT OF THE POSTCARD COMPETITION.



HE postcard competition for comments upon the supplements published in our Summer Issue has brought the usual shoal of replies, from which we publish a selection. We expressly mentioned that comments might be sent in prose as well as in verse, because we wished to give a chance to readers whose pens do not move easily in rhythmic cadence; for though chemists, as a body, are notoriously poetic, there are yet a few among them without the divine atllatus, and apt, as Byron says, "to take for rhyme, to hook their rambling verse on, the first that Walker's Lexicon unravels." The commentators in prose, however, are only balf as numerous as the versifiers, and, upon the whole, their comments are neither so striking nor such good reading.

Of the rhymesters, some have clothed their comments in the form of acrostics. As thus:—

TO SPRATTS (LIMITED).

Sing praises to old Spratt, whose cakes are known the world around, Prepared with eare, luxurious fare for dogs both lost and found. Remember 'mongst the canine race Spratt's Biscuits always take first place Anæmia, we are well assured, can very easily be cared.

Take Spratt's Dog Cakes with "C. L. O.," 'twill make blood quickly—this I

To all who own a dog (or eat?), when buying for them, "think of Spratt."

J. V. M.

B., W. & Co.'s Tabloids.

To those who, suffering any ill,
And physic take against their will,
Burroughs the matter has made easy:
Loathing no more will drive you erazy.
Only a tiny "Tabloid" swallow—
Insude its sugar-conted hollow
Dwells the relief you fain would find,
Soothing alike to body and mind.

FELIX.

LORIMER'S PEPSINE SAUCE.

Let verses five in praise be sent On Lorimers' grand supplement; Reward they'll reap from rich and poor In increased sales of "Sauce," I'm sure.

My friends dyspeptie, take advice— Exchange your drugs for something nice; Remembering all the cures you've taken Spell "failure," and your faith's now shaker,

Procure some "Pepsine Sauce" (the name Excites a "gastronomic flame"). Please see that all the labels show Sauce made by Lorimer & Co.

If wives would on poor husbands try it, New life 'twould give and increase diet, Enrich the blood, digest the food— Sauce such as this must do one good.

L'ENVOI.

And in conclusion I would mention U claim all chemists' close attention; Consult your lists and they will see Examples of true industry.

M.

The shortest comment of all comes from Scotland It is addressed to BOWERS BROTHERS, and runs:—

"The Koker's nuts."-J. S.

The "Century of Enterprise" supplement has filled a large number of competitors with admiration. This is what some of them say:—

To J. RICHARDSON & Co. (LIMITED).

Richardson. Enterprise, sure enough!

Mother Nature is voted far too slow, and the inhabitants of our world are brought on board nowalays with utmost despatch (Liq. secale annua, Richardson's). Still, they have a poor opinion of the genus home, since they concentrate all their ideas and preparations in the endeavour to make it better. They infuse into their fellows new force, and extract during the process much of that power which makes the mure to go. Many of their notions are tinetured with much spirit, and the results may be said to percolate through the whole contents of humanity. They distil sweetness and strength. Their researches through matter, men, and medicine are past all joke. Their business may be considered as little else than general pillage. Yet they publish their works to all mankind in the most during manner, and one hundred years are too short for their deeds.—J. B. M.

One of the most interesting items in the Summar number of the ℓ , ℓ , D_{ℓ} is the supplement entitled "A Century of Enterprise." There is not sufficient space on a postcard fully to comment on it. The plates are excellent and furnish a gool idea to every young retail chemist of how business is conducted in the wholesale way. One cannot read the pages of it without feeling the thoroughness with which every department is managed, and without being impressed with the sense of that old motto, "What is worth doing at all is worth doing well."—J. G. C.

"A Century of Enterprise" is, to my idea, the most interesting inset which appeared in the Summer number of The Chemist and Druggist. The articles are splendidly written, and the drawings are admirable, especially that one in chalk [sic!] of the energetic members of the firm. It reflects great credit on Messrs. Richardson to promee such a fine work of art. May they long continue to prosper in their enterprising business!—Voxal.

I think Messrs. Richardson & Co. (Limited) have issued the most telling-supplement. In the first place, the title is striking and sure to attract; secondly, the illustrations are very handsome and instructive: thirdly, the text of the supplement is eoneise and interesting. In fact, the whole pamphlet from cover to eover is a marvel of neatness and style, both in-printing, illustrations, and everything else.—FELIX.

We have only one fault to find with these comments, and that is that they are (no doubt deservedly so) too absolutely laudatory. A little hint here and there of possible improvement would, no doubt, have been welcomed by the firm themselves. The following is an example of a more critical style of comment:—

To W. GRAY & Co.

In their supplement have made a mistake by the selection of their colom: The painting-trade deserves a better colour; difficult to read by gaslight. Query: what colours are easiest to read? Certainly not blue on black. The design, simple and forcible, would have been much better in a cream tint.—JOHN LONG.

The comments of Messrs. Burroughs, Wellcome & Co.'s prose admirers are not very happy, but the fine portrait of Miss Lily Hanbury has inspired several competitors to burst into verse, and others still enjoy their little pun at the name of the house. We print the following:—

TO MISS LILY HANBURY'S PORTRAIT.

Beauty, wit, business, all combined
To catch and hold the busy chemist's mind;
In hasty glance through insists forty-two
That pretty face upon his senses grew,
And stopped his hand, and held his errant eye,
Miss Lily's features 'midst such text to spy.
He gazed in rapture, hoping it was sent
As handsome editorial supplement,
Until his optics in the corner spied
The artful "advert," which no frame could hide;
Then smiled at B. & W.'s rare graphotone
That caught and held his mind in her alone
And Lanoline.

E. IL R.

A charming type of beauty and of grace
Arrests me as I gaze upon Miss Lily Hanbury's face.
Were I a king and she would be my queen,
I'd cherish and I'd love her for the sake of "Lanoline."
Cutte.

TO LANOLINE.

Though." Lanoline" 's an "ointment base,"
It is an ointment good;
If chemists only "Wellcomed" it,
Then every "Burrough" would.
LEVICO.

To B., W. & Co.'s PRICE-LIST.

This firm, still "Burroughs" in drugs rare, And "Wellcome" the additions are: To ease the pains of those who suffer, Their services they gladly proffer.

FELIX.

Once again a work of art,
Issnes from the banks of Dart—
"Burroughs Welleame's" works and mill,
And their office on "Snow Hill,"
Here are shown, in colours bright,
Blended with the soft daylight.

JH.

May, Roberts & Co.'s list and their announcement that they employ no travellers have taken the fancy of some competitors. The two following comments are addressed:—

TO MAY, ROBERTS & Co.

Is it a fact? No travellers required? Yes. May, Roberts & Co. are always at hand, beside your chair. Take them off the nail, and look up the price: there is no fear of their charging two prices or putting on the odds. Very nice, richly-designed cover on list, very convenient for a shop, full of information.—J. L.

"Come in! Walk round and view our show; Note prices," say M., R. & Co.,
"With the new supplement we send
Half-yearly lists to every friend.
Buyers' time is saved, and travellers too,
By ordering when and what suits you."
Page after page, from A to Z,
Fully confirms all we have said;
The list of cures for human ills,
One hundred and twenty pages fills.
White, black, green, red, and golden hues
Adorn the book—six hundred views
Of various "requisites" are found,
And a good map is also bound
Of London and St. Paul's great dome,
With May & Roberts' business-home.

W. B.

Here are some more prose comments placed at random:

TO E. A. HEARN & CO.

The bottles of E. A. Hearn are brought prominently before the trade in the "Nnrsery-rhyme" Supplement. The novelty of the design seems to me to lie in the fact that so many elemists have been persuaded to "group" together for the sake of hearing the ditty in praise of bottles, quality and price of which are brought so strikingly before the trade.—J. D.

To Johnsen & Jorgensen.

Inset is excellent—"simply perfection"—very brilliant showcard. In my opinion, it is the best of all the insets. Seldom does a bottle-manufacturer show so much taste and design. If a chemist had such a design, with an M.D. appreciating his specialities, it would take well.—J. L.

John Bull poses as critie, I judge, and exclaims, "Simply perfection!" His attitude as a critie is natural, and his decision is correct. His stock of specimens, though, is not complete. The shop-rounds manufactured by the firm are elegant, and might have decorated the table, as they do the shelves on which they may be placed. The stoppers and labels are made in various patterns, the labels themselves being unwearable, and, when decorated with a gold border, give an appearance of richness and grandeur unattainable by other means. For syrup, oil, and acid bottles these labels will ultimately replace the paper labels.—T. H.

TO SPRATT'S PATENT (LIMITED).

There's a "sprat" in every dog's mouth, perhaps a young cod. They wag their tails when Spratt is mentioned, especially "old friends round the fireside." If they could read the supplement, they would say to every chemist, "Buy Spratt's cakes and cod-liver oil for me, and there'll be no more hydrophobia in the world."—J. L.

TO OPPENHEIMER, SON & CO. (LIMITED).

Although the picture of the medieval German procession is most artistic in style and finish, yet it seems rather out of place to have the procession headed by a banner emblazoned with the word "Palatinoid." I think it would have been more striking to have treated us to the picture without that word, or else to have given the procession a more imodern aspect.—Figure.

TO A. & F. PEARS (LIMITED).

Pears so apply themselves that competitors are run hard. Think you, will they make a clean sweep of them? Turn our eyes as we may their energy Pears so upon us that we cannot get away from it. The firm may be said to Pears its way into faune! Curious'y enough, Pears allow no peer, for Pears are peerless! It appears Pears cannot tolerate peers—save as

customers. If you ask "Can such continue?" I can only say with Teps,—"Pears so I" at any rate, let soap so! Good morning, have you used Pear's soap? If not, why not? You won't be happy till you get it. Mind what your good old granny has done for you, as you will never do as much for her.—J. B. M.

We now select some of the comments in rhyme, al placing them at random.

To Bowers Brothers.

Print, print, print,
At Blackfriars Road, O Eowers!
And I would that all firms who advertise
Had a gleam of thy wit and powers.
Oh, well for the traveller bold
That he soothes his sorrows at "Nai,"
Or a quiet game of a "hundred up,"
While thy "man" sucks the cocon-ant sap.
He is over the land and over the sea,
So neat, so airy, so graceful and free,
And chemists are "hustling" to send their greenings
And golden dollars to thee.

Print, Bowers, print!
Old Samson grows weary to see
A firm who can build up "pille's"
With a strength and zest like thee.

A. S. W.

The "milk" from your cocoa-nut now has been flowing

For six months or more without ceasing;
And firms who have taken the hint you've been throwing

Say they find their trade largely increasing.

Frank

TO JOHN RICHARDSON & CO. (LIMITED).

John Richardson & Co., John, When you at first began, A hundred years years ago, John, To soothe the ills of man, Your business it was small, John, Of modest retail name, Worked on a "Minor" scale, John, Though moving on to fame.

But now 'mong wholesale firms, John You hold a "Major" place, In enterprise and skill, John, You've run a gallant race. A century of work, John, Has placed upon record That in your hands "the pill," John "Is mightier than the sword."

Your "supplement" unique, John-In Summer C. & D.,
Is proof of your success, John,
In realms of pharmacy.
Its illustrated page, John,
Should further business bring,
And now I'll close my rhyme, John,
Yours truly,
WYECHILLYE.

"A Century of Enterprise,"
As sketched by Messys. Richardson,
Makes each young chemist rub his vyes
And gird his student's armour on.
Vast fields of science to explore,
And unsolved problems lie before.

What others have done he may do
Whose mind is filled with high intent—
With noble aims and purpose true:
He too may write a supplement.
And future C's and D's will find
He left an honoured name behind.

CANTRELL & COCHRANE.

W. B

J. 75. M.

Cantrell & Cochrane's Ginger Afe. I always hail, by road or rail, By mail or sail, in vale or date. It will not fail (I will go bail) If when you quail, when blows the gale, You're sick in pail, and lowly wail As if in jail, to cure your ail. (This is a truthful Irish tale.)

J. V. M.

TO EDWARD COOK & CO.

The prettiest supplement of the lot is "Cooks," and I do hope They'll take a lot of orders soon for their Riviera Soap. The market it is flooded now, and soaps with soap do cope; But nothing in it can compete with Cook's Riviera Soap: Twill keep you clean, and sweet, and uice, and if inclined to mope Indulge in an ablution, using Cook's Riviera Soap. This soap is made by Edward Cook & Co., of London town, With other kinds, "Musk," "Honey," "Lavend er," and "Windsor" (brown), "White Moss," "La Frauce," and "Mareehal Niel," also "The Queen's Bouquet"-

Soaps which are used by high and low, in "London day by day."

TO WM. GRAY & CO.

To paint the lily is no good, But gentlemen who paint on wood, And wish a paint that's never dull, Should buy their stock from "Gray's," of Hull. VERNON.

To J. C. Ayer & Co.

The gent portrayed in Ayer's ad. Is evidently very bad; For whether it's a cough or sneeze, He's suffering, and ill at ease. Let's hope the remedy at top Will cause his eough or sneeze to stop, And straightway cure him, thanks to the "U.S.A. Standard Remedy."

TO JAS. BURROUGH.

" S.V.M." and "S.V.R.," Initials known both near and far, And chemists use them daily ; But where to buy, and buy them wel!, Isn't common knowledge, so I'll tell Of one who suits me gaily. Try Barrough, Cale Street, Chelsea way : His price is low, and chemists say No spirit e'er supplied to them Can touch his "S.V.," "R." and "M."
P.S.

Of whiskies, there's the "Hermit" brand— True "Scotch"—and please to understand I'm Scotch as well, but never yet Could say I have the "Hermit" met. His "Ozone" whisky's very nice «(It's Irish, and goes well with ice), Also his "orange," sherry, Port. «Editor, growling.) "A long P.S. Please cut it short."

TO HEARN, WRIGHT & CO.

'The Army and Navy of England to-day Have nothing in common with bottles, folks say, But there is a connection, and money you'll earn By giving your orders to a firm known as Hearn.

Hearn, Wright & Co.'s bottles, their like can't be found. The Army and Navy have soldiers renowned. If you wish the connection put plainer and ueat, Hearn's goods, like our soldiers, they cannot be beat. MITCHELL.

TO BEWLEY & DRAPER (LIMITED.)

While looking through your supplement I fancy I can spot Among the various faces there that of Sir Walter Scott. He used, 'tis said, "Dichroic Ink" (prepared on Irish ground), Called Draper's, and to-day it's known no better can be found, It "turns at once jet black," and "flows quite easily from the pen," "Nor thickens or deposits" (other iuks do now and then); And I have used it many years, which is a guarantee.

Glaimed high amongst great men am I," so says the C. & D.

MITCHELL.

A large number of competitors are disqualified because their comments (some of them, by the way, are not at all bad) are addressed to firms advertising in the body of the paper, while the competition is limited to the supplements. One or two have sent libellous and abusive postcards. One reader was so smitten with the "comments" idea that, having occasion to buy a sifting and mixing machine, he

forthwith addressed a postcard to Mr. Wm. Gardner, of Gloucester, as follows:-

> In this week's ℓ' . & D, you advertise A "Mixer and Sifter," which your firm supplies: Pray send particulars of size, price, power, How much 'twill mix and turn out every hour: Onote for a first-class guaranteed machine, To suit this age of competition keen! Delivered free to this our ancient town, With utmost discount for prompt cash paid down.

Mr. Gardner has forwarded us this postcard, but though we print it here as a curiosity, it is, of course, barred from competition. An effusion (also hors concours) to "The Editor of the C. & D." may fitly close the selection:-

Good morning, Mr. Editor! It does one good to hear That you can write, talk, sing, and crow like any chantieleer, And have the gift of prophecy, like Israel's ancient seer!

What we should do without your aid it puzzles me to tell, For everything you undertake is carried through so well-For energy and enterprise your paper "bears the bell."

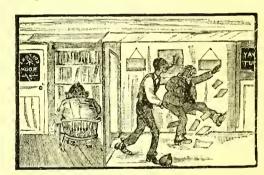
Your 'leading articles" are good, and keep us to the fore In pharmaceutic history and all its present lore ; Besides, of useful recipes you print an endless store!

Your comprehensive C. & D. we welcome as a friend, While all throughout the "Supplement" important news is penned. May health, prosperity, and joy be yours till time shall end!

W. B.

The editor begs to disclaim connection with "Israel's ancient seer," and regrets to say that he has never known a writing, or talking, or singing chanticleer, nor can he lay claim to the accomplishment of being able to crow like one.

A pharmaceutical sketcher sends us a highly-coloured drawing, of which we give a reproduction from the wood.



This is his idea of how we dispose of anxious competitors. The knock-out process is still going on, and we must reserve our decision in regard to the awards until next week.

WOMEN'S CONGRESS ON PHARMACY.

This Congress was opened at Chicago on Wednesday of last last week. The opening address was delivered by Mrs. Ida Hall Roby, Ph.G., "Chairman Woman's Committee," and

thereafter the following papers were read:—
"Women in Pharmacy," by Mrs. Grace Abbott, Ph.G.,

Philadelphia. "The Progress of Chemistry," by Mrs. Adeline E. P. Cummings, Ph.G., Highland Park, Ill.
"The History of Pharmacy," by Mrs. Marie Blahnik,

Chicago.

A Paper by Mrs. Mary G. Minor, Ph.G., Hiawatha, Kan.
"English Women as Pharmacists," by Mrs. Clarke Kcer
(read by Mrs. T. E. Cope, special correspondent for the Queen, London. Several other papers by English pharmacists were also read.)

"Women Pharmacists in Public Institutions," by Miss Jean

Gordon, Ph.G



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 31.

ACID (CARBOLIC).—The market is tending somewhat easier. Liquid carbolic (97-98) can now be had at 1s. 8d. per gallon; Crystals, 39-40, at $6\frac{1}{2}d$.; while for 34-35, $5\frac{1}{4}d$. per lb. would probably be accepted, although $5\frac{1}{2}d$. per lb. is still asked

ACID (CITRIC) keeps exceedingly firm, at 1s. $6\frac{1}{2}d$. per lb. for English brands on the spot.

ACID (OXALIC) is somewhat searce on the spot, at the established price of 3d. per lh.

ALOES.—Fine Zanzibar aloes in skins is scarce, and would probably bring from 90s. to 95s. per cwt., if offered. At today's auctions this quality was not represented. Of Curação aloes a fresh arrival of 356 packages from New York, the first which has been received for some months, was put up for sale, and wholly disposed of at a fair advance upon the last auction sales. Fair to medium brown and livery brought 37s. to 42s.; middling, 25s. to 33s.; bright Capey, 16s. to 20s.; ordinary dark brown, coarse and dull, 12s. to 15s. 6d.; while 104 cases were knocked down in a single lot at 7s. 6d. per cwt. Of Cape aloes also there were two new arrivals, to gether 73 cases, the whole of which sold at steady prices. Fine bright smooth, 23s. 6d. to 24s.; fair seconds, 21s. to 22s. 6d.; drossy soft and partly stony, from 20s. down to 15s. per cwt. A parcel of Socotrine aloes from Bombay, soft and very dark in colour, although of good flavour, was bought in at 80s. per cwt.

AMBERGEIS.—About 100 oz. of good quality were offered to-day and bought in—140s. per oz. for fine bright, 85s. for bold grey pieces of good flavour, and 75s. for ditto chips. The demand is sluggish, and with a constant and sufficient supply prices continue to recede gradually.

ANISE.—The market is very dull, and only a few small transactions are reported on the spot, at from 22s. 6d. to 24s. per cwt. for fair to good Russian seed. At auction 78 bales rather small and chaffy Russian anise was bought in, at 22s. per cwt.

ARECA NUTS.—In over-supply and not much wanted. For fair quality from Ceylon 18s. per cwt. is asked.

BALSAM COPAIBA.—A parcel (which has been shown before) of clear thick pale Maranham is held for 1s. 7d. to 1s. $7\frac{1}{2}d$. per lb. Another lot of 18 eases from Barranquilla, yellow to grey, partly thin and partly very thick, was bought in.

BALSAM PERU is very neglected. A few cases at to-day's auctions were bought in, at 5s.9d. per 1b. nominally for fair thin.

Benzoin.—Exceedingly dull of sale. The supply of Sumatra gum was not particularly large, and certainly offered a very poor selection. Of 41 cases offered, 11 sold, at 40s. per cwt., subject to approval, for dull seconds, very old fracture, and containing but little almonds; for ordinary seconds, very badly packed, small almondy centres, 80s. per cwt. was refused. Six cases dull hard Siam block, very

small almonds, sold cheaply at 43s. per cwt. For a parcel of clean pale grey siftings, partly blocky, 9l. 10s. per cwt. is wanted by the holder. A parcel of dull grey Siam siftings, advertised for sale "without reserve," could find no buyer, and was bought in. Other lots of Siam gum sold very cheaply, 26 cases being disposed of, at 16l. for small to bold pale almonds, partly blocky; 7l. 15s. to 7l. 17s. 6d. for small clean almonds, in block; and 60s. per cwt. for common grey low block. Two cases false packed Sumatra seconds, very reddish borders, brought 6l. 5s. per cwt. a good price. Palembang gum sold at very high prices, a parcel of 26 cases medium almondy, in small boxes, realising 38s. 6d. per cwt. Another lot of 8 boxes dull grey gum, offered "without reserve," brought 14s. per cwt.

BUCHU.—Fifteen bales have just been received from Cape Town by the *Dunottar Castle*. Several parcels were offered, but only 12 bales good bright green round leaves sold at 5d, per lb.; yellow mixed at $4\frac{1}{4}d$. per lb., showing no alteration.

CALUMBA.—Of 339 bags offered to-day 120 sold at 11s. per cwt. for brown mixed sorts, partly stalky, dull and slightly mouldy, and 8s. for very common. A lot of fair bright yellow root is limited at 30s. per cwt.

CAMPHOR (CRUDE).—No business has transpired this week. The quotations are 132s. c.i.f. terms for Japan and 112s. 6d. c.i.f. for China, present shipment. At auction on Tuesday a further pareel of 105 tubs damaged Japan eamphor, salvage from the Radnorshire, sold without reserve. One lot realised 125*, the rest 122s. 6d. per cwt. Another sale was made at the auction to-day; 2 cases damaged China realised 111s., and 2 tubs ditto Japan 120s. per cwt.

CANARY-SEED.—New *Turkish* seed is arriving in considerable quantities, and may be had at rather lower rates. Owners of old seed are rather anxious to realise their holdings, but this, in a falling market, is not an easy matter. The present quotations for Turkish seed range from 46s. 6d. to 48s. 6d. The crop in Turkey is reported to be a good one, both as regards quality and quantity. The *Morocco* crop, on the other hand, is said to be small. This variety is held at 50s. to 54s. per 464 lbs. *Spanish* seed sold, without reserve, 33s. 6d. to 34s. 6d. at auction yesterday.

CANNABIS INDICA.—For fair greyish green tops a bid of 4d. per lb. was refused to-day, the price being 5d., for fair greenish siftings $2\frac{1}{2}d$., and for ditto brown $2\frac{1}{4}d$. per lb. is asked.

CANTHARIDES.—The market for *Chinese* files is exceedingly quiet, at from 10d. to 13d. per lb. nominally, according to quality. None were offered at to-day's sales.

CARAWAY-SEEDS.—Prices have shown a somewhat easier tendency lately. The quotation for good *Dutch* seed was 31s. 6d. to 32s. per cwt. a few days ago, but since then lower offers have been received, and 29s. to 29s. 6d. per cwt. is now being talked about.

CARDAMOMS.—In very small supply, but the demand is almost dead, and only 1 case pale long and round mixed Mysore was sold at 1s. 11d. per lb.

CASCARA SAGRADA.—The 60 bags old thick, partly quilly, dark, which have been repeatedly offered, were all bought in again at 35s, per cwt. to-day.

CASSIA LIGNEA has advanced considerably lately. Nothing is now to be had below 31s. per cwt., and although we have not heard any business reported at more than 30s. per cwt., at which 200 hoxes sold in the heginning of the week.

CHAMOMILES.—There is very little stock left, it is said, of the new flowers, and prices of Belgian chamomiles are tending upwards. The quotations now range from 58s. 6d. to 80s. per cwt. for small brown, of the second pickings, to fine pale flowers. Nine bales good pale Belgian Chamomiles were bought in at 70s. per cwt. to-day.

CHIRETTA.—Five bales of brown herb sold to-day at 7d. per lb.

CINCHONA.—The assortment of American barks offered to-day was very small. It included 60 packages soft Columbian, imported between 1880 and 1883, of very low, dull, woody quality, which sold at $\frac{1}{4}d$. to $\frac{5}{2}d$. per lb. For

4 bales Cartagena (a variety which is now very scarce), imported in 1891, a bid of $7\frac{1}{2}d$, was refused. There were also 2 cases, together 400 lbs. of South American red bark, very small to medium chips, partly quilly and of little colour; which were bought in at 3s. 3d, an offer of 1s. 10d, being refused.

CINNAMON.—At the quarterly auctions on Monday, 1,339 packages Ceylon cinnamon were offered, and about 950 sold at very firm prices, fine grades being rather dearer. The range of values is now: firsts, 8d. to 1s. 4d.; seconds, 7d. to 1s. 1d.; thirds, $6\frac{1}{3}d$. to 1s.; fourths, $6\frac{1}{3}d$. to $9\frac{1}{2}d$. per lb.; fair chips, $2\frac{1}{3}d$. to $2\frac{3}{2}d$.; broken quill, quillings, &c., 4d. to 6d. per lb

COCA-LEAVES.—South American leaves are very dull of sale, fair bright green broken Truxillo being bought in at auction at 1s. 3d., good thick brownish Huanoco at 1s. 4d. per lb. Four small bags from Colombo were also shown, and two of these, dark thick brown damaged leaves, sold at 1d. per lb.

COCCULUS INDICUS.—The demand is very limited. The normal price is 8s. per cwt.

COPPER (SULPHATE).—Quiet and easier. Anchor brand is quoted at 15*l*. 5*s*. to 15*l*. 10*s*. per ton in London; Macclesfield from the works, at 15*l*. f.o.b. Liverpool; but second-hand holders are offering the same brand at 14*l*. 10*s*. f.o.b. Swansea

COWHAGE remains quite neglected. Six tins only were offered at auction, and for these there were no bids even at 1d. per oz.

CREAM OF TARTAR is cheaper at present than it has probably ever been before. From Bordeaux there are offers of best white crystals for prompt shipment at 66s. 6d. f.o.b., and in London 72s. per cwt. is asked, but cannot be obtained for the same quality.

CROTON-SEED.—Twenty bags of very small seeds from Ceylon realised 25s. per cwt.

CUBEBS are neglected; 70s. was suggested as the price for 4 bags small brown shrivelled berries, and of another lot of 14 packages from Bombay, 4 sold at 70s. per cwt. for good brown small mixed; for a less desirable lot a bid of 62s. was rejected.

CUMIN SEED.—The market keeps steady with very small supplies of good *Maltese* seeds, while the reports from *Morocco* with regard to the new crop are unfavourable. Ten bags dark Malta realised 35s. per cwt. to-day.

CUSCUS GRASS continues to realise high prices; one bale pale in bundles sold to-day at 25s. per cwt.

ERGOT OF RYE.—Another consignment of 30 bags ergot of rye was received from Vigo by the *Thames* this week. Common kinds are in good supply. At to-day's auctions five bags, small to bold, very dusty old *German* sold at 1s. 7d. per lb. On the whole the market is tending rather easier. A parcel of 24 casks bold but very wormy old Spanish ergot was bought in at the sales at 1s. 6d. per lb., but the owner would probably accept 1s. 5d. per lb. for it. Three bags dull wormy mixed German ergot sold "without reserve" at 1s. 3d. per lb.

FENNEL—Forty bags Bombay fennel seed of fair quality were bought in to-day at 17s. per_cwt.

FENUGREEK-SEED.—For 20 bags very pale seed, from Bembay, a bid of 9s. per cwt. was solicited in vain.

GALANGAL.—A parcel of country-damaged root from Canton was bought in at auction at 13s. per cwt., and another lot of 37 bales, also damaged galangal sold to-day at 17s. per cwt.

GALLS.—At auction 16 bags damaged Turkey galls, sold at 39s. per cwt. for white, 41s. for green, 53s. for blue, and 10s. per cwt. for some very common dark lots.

GAMBOGE.—Of 12 cases shown to-day, 5 sold at 9l. 10s. for Saigon pipe small to bold dull and ricy fracture, 9l. 5s. for ditto mixed with lump, and 9l. for bold lump. A parcel of fine bright gamboge, slightly damp, was bought in at from 11l. 10s. to 12l. 10s. per cwt.

GINGER.—At the end of last week *Bengal* ginger advanced in price, 45s, per cwt. being paid privately. *Cochin* ginger is easier, 100 bags small to medium washed being sold to-day at .59s. per cwt.

GUM ACACIA.—The market for Soudan sorts continues to drag, and it is very difficult to effect sales; fair pale soft sorts are held for 60s. per cwt. Of Trieste gum, 3 cases fair medium picked drop sold at 6l. 10s. to-day. There have been several consignments of good Cape gum lately, and some of these were offered; small pale dusty sorts realising 5l. 15s. per cwt., while dull grey drop brought 45s.

GUM ASAFŒTIDA.—There is practically no stock left here, and imports, especially of fine quality, would realise very high rates. Four cases of common quality offered to-day were strongly competed for, and sold at the high price of 30s. per cwt. for stony reddish block and dark loose siftings.

GUM MYRRH.—About 100 packages were offered for sale to-day. The demand was slow, however, and the number of packages sold did not exceed 15. Common Aden picked gum sold at 92s. 6d.; good sorts at 85s., and dusty ditto at 72s. per cwt. For small clean siftings, a bid of 77s. 6d. per cwt. was refused, 80s. being the price, and pickings realised from 30s. to 39s. per cwt. Fine selected gum is limited at 8l. 10s. per cwt.

HONEY.—New Californian honey is arriving: 64 cases shown to-day good clean yellow and orange, not yet set, brought 38s. to 39s. per cwt. Three barrels thick black liquid sold at 14s. Jamaica honey not in much demand, and showing no change in price, though tending rather easier; 16 casks rather dark brown liquid honey realised 20s. to 22s. to-day.

IPECACUANHA.—Our stock, which was reinforced by 18 packages Cartagena root per Orinoco from Panama, is now larger than it has ever been known to be in the history of the article. There are at present in the dock warehouse over 1,000 bales of the drug, of which about 850 bales are Brazilian, and 150 Colombian (Cartagena), with a few packages of spurious root. To-day's auctions included a parcel of Brazilian root, which was shipped from South America, after remonstrances had been made by the importers as to the admixture of stalk with the drug. This parcel showed a marked improvement in quality. The demand at to-day's sales, however, was very slack, and of 65 packages Brazilian root only 11 sold at very irregular rates, but mostly at 3d, to 4d, decline. Fine stout to fair sound, partly annulated, 6s. 3d. to 5s. 10d.; medium, partly damaged, 4s. 10d. to 4s. 6d. per lb. Of 20 bags Cartagena, 8 of good stout quality sold at 3s. 8d. to 3s. 9d. per lb. for sound, and 3s. to 3s. 2d. per lb. for damaged.

JALAP.—Of 13 bags, 8 sold: fair heavy Vera Cruz root at 1s. 1d.; small to bold dull brown, partly light Tampico mixed at 7d. Very small shrivelled Tampico root is held for $9\frac{1}{2}d$. per lb.

Kousso.—Much lower. Of 6 bales offered 3 sold to-day at 6d. per lb. for fair loose flowers, rather dull.

LINSEED keeps very firm at 55s. to 58s. for Sicilian, 43s. to 44s. for Russian, and 43s. to 45s. per 416 lbs. for River Plate and East Indian seed.

MANNA.—The new crop, which is a good one, is now being offered: best flakes, in original cases, are quoted at 2s. 8d., broken manna at 1s. 3d. to 1s. 4d., f.o.b. Gerace is not being quoted, and it is expected that, owing to the favourable season for other kinds, none will be collected.

Musk was one of the articles in which the chief sales were effected to-day at prices which show no alteration on the last sale-rates. Of Tonquin pods first pile 13 caddies were put in auction, 3 of which sold at 54s. for small to bold thin grey skin and thick underskin, fairly dry, 45s., to 45s. 6d. for small to bold old-fashioned dry thick skin and underskin; for small to bold fine thin blue skin and underskin, but rather damp, 65s. is wanted, a bid of 62s. being declined; 1 caddy second pile-pods old-fashioned medium to bold very thick skin brought 33s. Of third-pile 21 packages, all more or less adulterated, were offered: 11 of these brought from 22s. to 24s. for old-fashioned untrimmed dry hard thick skin and underskin; 26s. for fairly dry brown partly blue skin and underskin; 21s. for old-fashioned pat broken thin skin, part dull and untrimmed pods; and 16s. for small to bold old-fashioned very thick top and under skins; 2 caddies dry fair China Cabardine musk realised 12s. 6d. per oz.

MUSTARD-SEED.—The new crop is said to be unsatisfactory in respect to quantity, and the price, especially of brown seed, is tending rather higher.

OIL (CASTOR).—Two parcels (479 cases) fair yellow seconds *Calcutta* (rusty tins) were sold to day "without reserve" at a reduction in price—viz., from 2d. to $2\frac{1}{3}d$. per lb., a few lots at $2\frac{1}{4}d$. per lb. This oil has not often been so cheap as it is now.

OIL (COD-LIVER).—It is said that the market has begun to show a slightly firmer tendency. Good non-congealing Norwegian oil has been sold at 55s, per barrel lately.

OILS (ESSENTIAL).—Star-anise is dull of sale, the spot price ranging from 5s. 6d. to 5s. 7d. per lb. American oil of peppermint is reported somewhat dearer, HGH being said to have been dealt in at 11s. 9\frac{1}{2}d. per lb. Mitcham oil is also reported to be much dearer; 3bs. per lb. is said to be the price for good quality to-day. Sicilian oils are tending a little lower. For a small parcel of cajuput oil in sale to-day, a bid of 2s. 5d. per bottle was refused as being 1d. below the price. East Indian geranium oil is held for 7d. to 8d. per cz. For 15 cases oil of cassia, said to be "of good analysis" 3s. 2d. per lb. is asked, a bid of 3s. 1d. being rejected to-day. An 83-lb. case of Pennyroyol oil from the South of Spain was knocked down at 3s. 3d. per lb.

OPIUM.—" No business worth speaking of has been done in London for a good many days," is the report with regard to our market. The only sales of which we can hear this week consist of about four cases common soft shipping opium at fairly steady values. There is no pressure to sell, excepting among holders of common qualities, but if anyone were to force the market, he would have to submit to a considerable sacrifice in order to effect a sale. Our Constantinople correspondent writes, dated 18th inst.: "The only transactions we have to report this week are 25 baskets of new current opium, taken for account of a Constantinople firm, who are in the habit of buying every year for the Dutch Government; the price paid, 112 piastres, will be equivalent, allowing for loss in weight, to 12s. 4d. per lb, f.o.b.; also 4 cases of manufacturing material, old, changed hands, two Yerli tale quale at 11s. 3d., and two current tale quale at 10s. 8d. per lb., f.o.b. Owing to the money crisis, and the cholera epidemic, which has gained a good footing up in the narrow streets of the Jewish quarter, business in every branch is practically at a standstill. All bankers and capitalists refuse to advance any money on goods, except at very high rates of interest; this naturally forces many holders, who are obliged to place their goods in bond, to meet the demands of their clients, to sell out at a sacrifice. It is therefore owing to this that our opium market is not much higher, for we consider any price below 11s. to 11s 6d. per lb. (owing to our small crop, and to the shortness of this year's Persian outturn) very cheap. Under the above-mentioned circumstances, it is very difficult to foretell what the future prospects of our opium market will be. Any orders coming in from the consuming markets will send up prices to 12s. and 12s. 6d.; but if, on the other hand, we keep quiet for another twenty to twenty-five days, our market is sure to go down again 6d, to 8d." Another correspondent announces a slight advance, with a very firm market at the close. The arrivals, he says, have been 340 cases, against 1,745 last season.

ORANGE-PEEL.—Fair thin gelatine Malta peel continues to realise about 10d. per lb. in a small way. A few packages sold at that figure at to-day's auctions.

Orris-root is reported rather cheaper from Italy, best select Florentine being now offered at 80s. per cwt., c.i.f. terms. At the drug-sales 1 cask fair greyish root sold without reserve at 62s. 6d. per cwt.

OTTO OF ROSE.—Considerable excitement was caused on the market, on Tuesday, by the receipt of telegrams from Constantinople, stating that the proprietors of the leading brand had raised their price by 7s. 9d. per oz., making it now 37s. 3d. per oz. f.o.b., or 38s. London terms. Many other holders have temporarily withdrawn from the market; others quote from 30s. to 32s. 6d. per oz.

POPPY-HEADS are again 6d. dearer, the quotations for Belgian being now per 1,000 $(10\frac{1}{2})$ kilos.) 17s. 6d.; (10 kilos.) 16s. 6d.; (9 kilos.) 15s.; medium, 9s.

POTASH SALTS.—Chlorate is firm on the spot, at $8\frac{1}{2}d$. per lb. for prompt delivery. September is quoted at $8\frac{1}{4}d$., October at $8\frac{1}{8}d$., November-December at 8d., and 1894 delivery at $6\frac{3}{4}d$. per lb. Montreal Potashes, 24s. 6d; Pearlashes, 43s. per cwt. English yellow Prussiate, $8\frac{1}{4}d$. to $3\frac{1}{8}d$. per lb. Bichromate, $4\frac{5}{8}d$. per lb.

QUICKSILVER keeps firm at 61.7s. 6d. per battle from the importers, and about 6d. less from the second-hand.

Quining.—The nearest market price for German second-hand is reported to be $8\frac{1}{8}d$, and at that figure several small sales are said to have been made. We also hear that early in the week a single lot of 30,000 oz. sold at $8\frac{5}{8}d$, per oz.; the report, however, is denied by the firm who are said to have made the sale.

RHUBARB.—Very slow of sale. Of 105 cases offered to-day, 7 only sold at low prices, namely: *Shensi*, medium size, bright coat, three-fourths pinky, one-fourth dark and grey, round, 1s. 7d.; small round druggists' root, 1s. 7d.; flat $high \cdot dried$, good bold, 1s. to 1s. $1\frac{1}{2}d$.

SACCHARUM MEAL.—A quantity of 50 tons of this article a dull grey powder representing the refuse of tapioca flour after extraction was offered for sale at to-day's auctions. A bid of 10s. per ton was asked for it, but not forthcoming.

SARSAPARILLA.—Difficult to place. Of 33 bales grey Jamaica, 21 sold at 1s. 2d. to 1s. 3d. for sound, and 1s. 1d. for damaged root; 16 bales Lima-Jamaica were also disposed of cheaply at from 3d. to 10d. per 1b., according to quality; and 4 serons fair Honduras at 1s. 4d. per 1b. Native Jamaica root is in rather good supply; there have been several arrivals of it lately, and 1s. is wanted for medium quality.

SENNA.—Tinevelly leaves, which are in pretty good supply, were freely sold by the principal holders at easy rates. The quality was very low. A few bales of medium to good green leaves brought $5\frac{1}{2}d$. to $6\frac{1}{4}d$. per lb., and some medium yellowish, partly specky ones $2\frac{1}{4}d$. to $3\frac{1}{4}d$.; but the bulk was very low dark and dull coloured, and this realised only from $\frac{1}{3}d$. to $1\frac{3}{4}d$. per lb. Dark pods brought $\frac{1}{2}d$. to 1d. per lb. The 270 packages offered were all sold.

SHELLAC closed firmly last week at the established a Ivance of 115s. per cwt. for October TN orange. At auction on Tuesday 646 cases were offered, of which 350 sold at steady rates for orange and very full prices for garnet—viz., first orange, fine pale, rather cakey, unworked ASSL, 120s.; dull reddish to good pale cakey and blocky seconds, 110s. to 115s.; Garnet, good free AC (without reserve), 97s. to 99s. per cwt. Privately, 113s. was accepted for 200 cases orange TN for September delivery.

Sox.—Fair China soy has sold privately lately at 1s. 6d per gallon.

TAR PRODUCTS.—Benzol is firm at 1s. $5\frac{1}{2}d$. to 1s. 6d. per gallon for both 90 and 50 per cent. Creasote, good liquid, has advanced to $1\frac{5}{8}d$., salts to 21s. Anthracene is quoted at 1s. to 1s. 1d. for A, and $9\frac{1}{2}d$. for B. Anthracene oil, 22° Tw., $2\frac{1}{2}d$. per gallon. Crude naphtha, 30 per cent. at 120° C., $7\frac{1}{2}d$. to 8d.; Solvent ditto, 90 per cent. at 160° C., 1s. 1d.; ditto at 190° C., 10d. to $10\frac{1}{2}d$. per gallon. Toluol is dearer 1s. $5\frac{1}{2}d$. being now the price. Pitch 24s. 6d., f.o.b., Gas tar 8s., f.o.b.

Turmeric.—Slightly firmer. A fair business has lately been done in *Bengal* root for arrival at unaltered prices, and, on the spot, small sales of fair old crop, medium quality, were reported at 17s. per cwt. *China* root offers at 18s. 6d. per cwt. Split *Cochin* bulbs have sold at 7s. 9d. per cwt. At auction 102 bags *China* and *Cochin* were bought in.

Vanilla.—Slow of sale, and gradually easing off in price. About 200 tins were offered to-day, and mostly sold, at 13s. per lb. for good $7\frac{1}{2}$ to 8 inch, 7s. 6d. to 8s. 6d. per lb. for 6 to $7\frac{1}{2}$ inch, 8s. to 9s. for good crystallised 5 to 7 inch, and from 5s. down to 1d. per lb. for ordinary to rubbish.

Vermilion.—Two cases Chinese vermilion brought 2s. 1d. per lb.

WAX (BEES') is at last beginning to show a decided fall in price. At to-day's auctions *Madagascar* was 10s. to 15s., and *Januica* 5s. to 10s. lower, 110 mats of the former selling

at 117s. 6d. for dull to 130s. per cwt. for fine quality, and 27 packages Jamaica realising from 7l. 7s. 6d. to 7l. 17s. 6d. for dark mixed to fine red and orange.

THE LIVERPOOL MARKET.

Anise (Chilian).—Eighty-six bags, just arrived, sold at $18s.\ 6d.$ per cwt.

GUINEA GRAINS.—Holders are inclined to realise, and sales have been made at 18s. 6d. per ewt.

GUM ACACIA.—The movement in Soudan sorts continues at he late rates.

OIL (CASTOR).—Although the demand, is not brisk the market remains steady, and good Seconds Calcutta are still held at $2\frac{3}{8}d$. First pressure French oil is a little easier, at $2\frac{1}{9}d$.

QUILLAIA is firmly held, at 16l. 10s.

WAX (BEES').—A steady demand has set in, and fine pale Californian has sold at 7l. 15s., and three packages low grade, at 6l. 15s. Chilian pale yellow has found buyers at 7l. 15s.; grey and yellow, 7l. 10s. Lafrican wax (Sierra Leone) sold at 6l. 7s. 6d.

THE AMSTERDAM CINCHONA AUCTIONS.

(Telegram from our Correspondent.)

AMSTERDAM, Thursday evening.

THERE was another sharp fall in the unit value at to-day's auctions of Java cinchona-bark. Only a quarter (1,783 packages) of the quantity offered for sale was disposed of, but for this no higher average unit than $2\frac{5}{6}$ c. per $\frac{1}{2}$ -kilo., or rather less than $\frac{1}{2}d$. per lb. The following prices were paid: Manufacturers' bark in broken quills and chips, 4c. to $33\frac{3}{4}$ c. ($\frac{3}{4}d$. to 6d. per lb.); ditto root, $7\frac{1}{4}$ c. to $17\frac{3}{4}$ c. ($1\frac{1}{4}d$. to $3\frac{1}{4}d$. per lb.); druggists' quills and chips, $6\frac{3}{4}$ c. to 72c. ($1\frac{1}{4}d$. to $12\frac{3}{4}d$. per lb.) The principal buyers were Mr. Gustav Briegleb, the Frankfort Quinine-works, Mr. Van Overzee, the Brunswick Works, and the Auerbach Works.

THE NEW YORK MARKET.

(Telegram from our Correspondent.)

NEW YORK, Wednesday night.

OUR market is very sluggish, and few transactions can be reported. Prices generally are only maintained with difficulty. Senega-root is easier, and may now be bought at 36c. for good quality. Mexican sarsaparilla, on the other hand, is dearcr, the stock in the hands of importers having been bought up by speculators, who hold at $9\frac{1}{2}c$. Mandrakeoot is lower.

At a recent meeting of the Pennyslvania Pharmaceutical Association, attention was called to the frequent adulteration of ground elm-bark with starchy substances, on account of the presence of which worms are frequently found in this article.

AMERICAN LINSEED-MEAL appears to be a thing to be avoided. Mr. John Newport states, in the Oil, Paint, and Drug Heporter, that pulverised cocoa-shells and buckwheat-middlings form from one-quarter to one-third of the component parts of the article which is foisted on the market as pure linseed-cake meal.

INCONSISTENT PROTECTION.—A correspondent of the American Soap Journal wants the duty taken off caustic soda because "there is not a pound of caustic soda made in the United States that equals the foreign make." We always considered that the sort of argument for protection. There is nothing more obvious to American consumers of caustic soda than the fact that their own make is wretched stuff.

Mew Companies.

S. J. Dalton & Co. (LIMITED).—Capital 4,250%. in 1% shares. To acquire and carry on the business of an aërated-water manufacturer, now carried on by Mrs. Jane Dalton, at 30 and 32 Skeldergate, York, under the style of S. J. Dalton & Co. The first directors are:—G. Mills, Jane Dalton, R. Donald, and J. Routledge. Registered office, 30 Skeldergate, York.

RIDGE'S INSECTIFUGA (LIMITED).—Capital 2,000l., in 1/. shares. Objects: To exploit a certain specific registered as "Ridge's Insectifuga," and to carry on such business as the company may see fit. The first subscribers (who take one share each) are:—James Ridge, Selborne Villa, Hassocks, chemist; J. Sloan, T. Mutton, Harmet J. Mutton, G. W. Mallet, Mary A. Mallet, J. W. Davies. Registered without articles of association.

JAHNCKE (LIMITED).—Capital 50,000l., in 1l. shares. Objects: To acquire the business of metallic-box manufacturers carried on by Ernest Jahncke, and to carry on business as metal-workers), wire-drawers, japanners, platers, &c. The first subscribers (who take one share each) are:—W. Cooper, 12 Coleman Street, E.C., bank director; W. E. Matthews, 1 Southwark Bridge Road, solicitor; A. G. Collins, 11 King William Street, E.C., broker; T. Williams, 1 Copleston Road, S.E., accountant; Ernest Jahncke, Canonbury Works, Dorset Street, N., manufacturer; the last address being that of the registered office.

PHILADELPHUS JEYES & Co. (LIMITED).—Capital 20,000l., in 10l. shares. Objects: To acquire and continue the business of a wholesale and retail chemist, carried on by Mr. Jeyes, at 6 The Drapery, Northampton. The first subscribers (who take one share each) are:—A. A. Jeyes, 6 Drapery, Northampton, gentleman; F. C. Jeyes, Brixworth, gentleman; O. T. Ward, 6 Drapery, Northampton, chemist; T. G. Turner, The Elms, Billing Road, Northampton, gentleman; F. Barker, 111 Holly Road, Northampton, clerk; F. J. Burton, 2 Turner Street, Northampton, clerk; J. T. Stanton, 6 Derngate, Northampton, clerk. The first directors are A. A. Jeyes, F. C. Jeyes, and O. T. Ward. Qualification, 10l. Remuneration, such sum as the shareholders may determine in general meeting.

Malto-Germ Extract Company (Limited).—Capital 2,000*l.*, in 5*l.* shares. To carry on the business of malto-germ extract, diastase, concentrated extract of malt, and other chemical products, and to undertake the business of manufacturing chemists and druggists. The first subscribers (who take one share each) are:—Alex. M. Parker, 114 Fore Street, E.C., merchant; Mrs. A. M. Parker, The Gardens, Peckham Rye, S.E.; F. Caulfield, Langside, Glasgow, merchant; Mrs. F. Caulfield; W. Crawford, 546 Govan Street, Glasgow, merchant; T. Crawford, 546 Govan Street, merchant; R. Crawford, 546 Govan Street, merchant; M. Crawford, 546 Govan Street, M. Crawford, 546 Govan Street, merchant; M. Crawford

Leslie's (Limited).—With a capital of 12,000l, inc 600 10l. deferred and 600 10l. preferred shares. Objects: To acquire and take over as a going concern the business of manufacturers and dealers in medical and surgical plasters, antiseptic dressings, surgical appliances, drugs, and druggists' sundries, carried on by Leslie & Co. (Limited) in London and Warwick. The first subscribers (who take one share each) are:—J. S. C. Renneck, Bond Court House, E.C., managing director of a public company; W. Draper, Denmark Hill, elerk; J. V. C. Renneck, Earl's Court. clerk; A. King, Brixton, secretary; C. A. Clulow, 9 Gracechurch Street, E.C., solicitor; W. Dawson, 18 King's Arms Yard, financial agent; F. Shapley, Sidcup, Kent, surgeon. The number of directors is not to be less than three, nor more than five; the first being C. G. Murrell, F. S. Shapley, and J. S. C. Renneck (managing director); qualification, 250l.; remuneration (other than managing, director) not to exceed 200l., divisible; remuneration of managing director, 300l. per annum, and 100l. per annum after 10 per cent. has been paid on the preferred shares and 200l. per annum after 15 per cent. has been paid.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views a concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

Estimation of Diastasic Action.

SIR,-In Mr. Dott's letter, published in your issue of today, there are one or two points which appear to require some explanation or reply from me. Let me, in the first place, correct one error in your report which has led to the repudiation contained in the last paragraph of Mr. Dott's letter. The time I mentioned as having been used in the paper was thirty minutes, not seventy.

With reference to Mr. Dott's very pointed denial of the fitness of my statement that he had "changed his mind" as to the best method of estimating diastase in pharmaceutical preparations, the following extracts should speak for themselves :-

... the test by iodine was not quite satisfactory in determining the extent to which digestion had taken place. He thought the simplest mode would be to estimate the amount of sugar formed .- Dott's remarks on Grierson's Paper, Yearbook of Pharmacy, 1892, p. 359.

The diastasic value cannot be accurately estimated by the amount of maltose formed unless the starch solution were always prepared in the same way. As the method of estimating diastase by testing for unaltered starch and erythrodextrin with iodine was not appreciably affected by the manner in which the starch had been gelatinised, that method must be regarded as the best at present known. - THE CHEMIST AND DRUGGIST, August 19, 1893, p. 301, abstract of Dott's Paper B.P.C., 1893.

Mr. Dott appears to resent my reference to the ease with which a homogeneous starch solution can be made when working with small quantities, and leads to the inference that the remark was beside the question at issue. I would refer him to the first paragraph in THE CHEMIST AND DRUGGIST abstract of his paper, in which the following statement occurs: "It would be difficult to make sure that the starch solution was homogeneous throughout." My remark was meant as a denial of this statement, and embodied the result of several years' experience in using the iodine method.

Mr. Dott claims to be the first to have noticed that the method of preparation of the starch solution influences the amount of maltose formed. That may be so, but he is certainly not the first who has experimented in that direction. If he refers to the Year-book of Pharmacy, 1893, p. 355, he will find noted there the result of my experiments—crude they may be, yet suggestive, as they were meant to be. They point in the opposite direction to Mr. Dott's experiments.

There is one sentence in Mr. Dott's letter which is unworthy of the writer, and which I should have treated with the contempt it deserves had it not been for the serious charge of plagiarism contained in it; it is that referring to the authorship of the iodine process. If Mr. Dott can show me where I claim any originality either in using or in applying the iodine method, I shall be delighted to admit the justice of his sar-casm, and to feel extinguished by it. In my paper of last year, Cripps was credited with being the originator of several of the experiments therein confirmed, and in which the iodine method played an important part.

I am, Sir, yours faithfully,

York, August 26.

E. A. GRIERSON.

Poisoning with Eucalyptus Oil.

SIR,—Reading your issue of May 13, I came across "The Australasian News," in which I noticed "Alleged Dangers of

Eucalyptus Oil." Your paper reports two deaths produced by eucalyptus oil. In the first instance an adult took one ounce and died, and in the second, a child aged 10 years took a tablespoonful and died too. During my practice I have had the opportunity to notice the effect of ol. eucalypti, and no doubt a big dosc of it will prove fatal. I should especially point out the case of the child, because what is a table-spoonful? It is supposed to be half an ounce; but during my practice here tablespoons generally contain one ounce, and surely that would kill any child of 10 years of age. The depositions in these cases were forwarded to the Pharmaceutical Society of Tasmania, and a resolution was carried unanimously :-

That the Council was of the opinion that it was doubtful whether tie child died from poisoning by eucalyptus oil at all, and that it would not be necessary to label encalyptus oil with a limited dose.

Regarding this resolution, I consider that the Pharmaceutical Society of Tasmania have not had the opportunity to notice the effect of eucalyptus oil; or it may be that the inhabitants of Tasmania can stand a lot more of the oil than those in Queensland. Faithfully yours,

Barcaldine, Queensland, July 10. OSCAR BANCKE.

Mitcham Peppermint Oil.

SIR,—We read in your "Notes on the World's Columbian. Exhibition," appearing in your issue of August 26, an extraordinary statement made by Mr. A. M. Todd to your representative that he shipped 2,400 lbs. of his Wayne County oil of peppermint to a London firm this season, and that in his opinion from half to two-thirds of the oil he sends to England is sold as Mitcham-distilled oil and at Mitcham prices. This statement appears to require proof in justice to all dealers and distillers of Mitcham oil of peppermint. If this is the case then most certainly the industry of growing. peppermint oil at Mitcham is doomed to extinction at a comparatively early date. We think that as Mr. Todd has volunteered to make such a sweeping and extraordinary statement, in justice to all concerned in the Mitcham industry he ought to state the name of the firm to whom he has made these heavy shipments. The matter obviously must not rest.

We are, yours sincerely,

95A Southwark Street, STEVENSON & HOWELL.

London, August 28.

[To prevent misapprehension, we may state that the importers of the oil in question distribute it in original cases for what it is, and Mr. Todd has always avoided the use of the term "Wayne County oil" for his "Crystal-white" oil of peppermint.—ED]

Appreciation.

"We are very much indebted," writes Mr. Bolton, of Nottingham, who acted as honorary local secretary to the B.P.C., "for the splendid report which you gave of the Conference. This opinion is shared by members of the Local Executive."

SIR,—The elegant Summer Issue was received a few weeksago. After carefully looking over every page of its entire contents, I must acknowledge that I derived a great deal of business information and pleasure from its pages.

While talking to one of the agents of the Druggists' Circular of this country, I noticed that he was surprised to learn that I was a subscriber to THE CHEMIST AND DRUGGIST, but at the same time he was well pleased, and complimented your journal very highly.

THE CHEMIST AND DEUGGIST gives me a very general information of the drug-business abroad, and it always affords. me pleasure to see it upon its arrival amongst my mail.

Cleveland, Ohio, August 15.

Respectfully, JOHN RANSCHKALT.

Medical and Pharmaceutical Novels.

"The Two Apprentices," by Mrs. Mary Hewitt, is an excellent story, showing an intimate acquaintance with the trade of a chemist and druggist of former days. The story is located in Uttoxeter, where she resided.—Anon. (288/93.)

S. P. SMITH.

American Pharmacy.

SIR,—Allow me to congratulate you on the excellency of your recent Summer Issue of THE CHEMIST AND DRUGGIST. You certainly cover a very large field, and do it thoroughly. Pardon me, however, for referring to your article "Aspects of American Pharmacy." The article docs us an injustice, though it would probably have fitted the situation as it stood a quarter of a century ago. Our pharmacists, as a rule, are men of education, and not "message-boys and soda-fountain attendants" who have obtained certificates and been licensed on "account of favouritism." In this country "every tub must stand on its own bottom." This applies especially to druggists, for, if they are not competent men, a wide-awake public will soon discover it, and give them a wide berth, because they are not willing to place their lives in the hands of persons whom they know to be incompetent. Consequently, the druggist who is unfitted for the business soon finds it unprofitable, and gives it up for other lines.

In another place you say some of our men are licensed because they are good salesmen. To show you the error of that, our prescription-clerks are seldom, except in very small towns, allowed to act as salesmen, the two lines of work

being kept distinctly separate.

Again, as to our State Boards of Pharmacy, I cannot see how you get the idea that they are composed of "easy-going business men, without special education, who happen to have a political pull." The Boards have absolutely no political significance. The examiners are appointed by the Governor of each State, solely on the recommendation of the Pharmaceutical Association, and it is the object of each Board to put forward its most thoroughly educated men. I do not know of a single instance of an examiner being, as you say, opposed to education or scientific progress. It is true we hold that no man, let him have all the pharmaceutical education possible to obtain, is fitted to be a druggist until he has had the practical experience necessary to make him familiar with the mixing and compounding of drugs.

Three or four of the States have practically no pharmacy laws; but they are very thinly settled, and are far behind their sister States in more things than the drug-business. It has always been a rule in any State having no pharmacy law that, when the law was passed, all those engaged in the business, competent or incompetent, were allowed to continue. But it is certainly safe to say that, since then, those admitted to the profession have been well qualified to follow

üt.

You must remember that we are, comparatively speaking, young in the practice of pharmacy as a profession. Before our laws were enacted regulating the sale of drugs, any man, no matter how ignorant, could set up shop without being molested by the law.

It is only a matter of a few years when the class of educated druggist will constitute the great majority, if not

the whole fraternity, in America.

In another place you make mention of our druggist, as a class, not being able to read or write a Latin prescription. That is a very great mistake. Take them as a whole, and not one out of ten will fail. Even if that were true, the day is close at hand when Latin prescriptions will be a back number. The physicians are fast discarding Latin for English in their prescriptions, and I think the English is by far the more practical.

The training of the pharmacist of America has the one purpose in view—that of perfecting him in the skill and knowledge necessary to the accurate and reliable compound-

ing of the physician's prescription.

The best dispenser is he who, other things being equal, has the most thorough knowledge of chemistry, pharmacy, botany, materia medica, &c.

But he must, to make a good druggist, have special ability for prescription-work, otherwise his theoretical knowledge avails him nothing.

Theory without practicability is barren, although the two, theoretical and practical pharmacy, are inseparably connected. It is with the latter that the druggist of to-day has most to deal.

You acknowledge that American pharmacists do good work, and that our Pharmacopæia reaches the high-water enark, but you give part of the credit for it to a European

education. If that is true, why do some of our eminent men in pharmacy go to Europe, and after seeing their methods, &c., come back and stick to our own methods? These very men say that America, with the vast strides she is making, will in a few years be at the head of the world of pharmacy.

The compilers of our Pharmacopocias are men who were chiefly educated at home, your article to the contrary not-

withstanding.

Why is it that English druggists, except in some instances, cannot readily get positions in the United States? It is not for lack of ability, but it is because they work too slow.

I have seen them working side by side, the American usually doing twice as much work in the same length of time

as the Englishman.

What avails it for a man to have special knowledge of pharmacy, if he has not the *rim* to make it felt? What we want is quick as well as accurate work. You are, in my opinion, again mistaken when you say that the drugtrade of the United States is at present much overcrowded. We pay to our men at least double the salary that English druggists do. First-class druggists readily command from \$1,500 to \$2,000 per year, and the large manufacturers pay their men even more than that.

Hoping that your next issue will be a little fairer to American druggists, I am, yours faternally,

Hartwell, Ga., U.S.A., August 15.

DISPENSING NOTES.

Correspondents should consult "The Art of Dispensing" in regard todis

pensing difficulties. Difficulties not explained therein may be sent to the

Editor, who invites a general expression of opinion upon the undermentioned topics.

Ferri Subsulphas.

This is the name of a styptic referred to in Allingham's work on rectal diseases. The manufacturers of the substance state that it is made according to an American recipe. Can anyone give fuller information than this?

Quinine, Capsieum, and Camphor Pills.

105/28. Country wishes the best excipient for the following pills:—

They must not exceed ordinary 5-grain pills in bulk.

[The best excipient is ac. sulph. aromat. q.s.; make the mass softish, and finish quickly.]

Iodoform Emulsion.

103/69. Antiseptic wishes a formula for an emulsion of iodoform in glycerine (10 grs. in 5j.). It is impossible to make an emulsion; but we should recommend rubbing up precipitated iodoform with glycerine in the proportion mentioned and sending out with a "shake the bottle." This will most likely meet the requirements of the prescriber; but if a special preparation be required, kindly mention purpose and how you wish it to be used.

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY, page 152 et seq.

103/42. Lancs.—It is one of the inexplicable anomalies of the poisons schedule that binoxalate of potash, as potent.

a poison as oxalic acid, is not in it, and can therefore be sold by anyone.

108/9. R. L.—If you have reason to believe that a prescription reading-

Mist, spt. vini ga'lici

is intended merely for the purpose of securing a "drink" for someone, it would be foolish to dispense it. There is no question as to legality. The Excise authorities have almost unlimited power in regard to the sale of spirituous compounds, and they have chosen not to apply this power in certain cases, amongst them bona-fide medicines or alcoholic preparations prescribed for the cure of the sick. It is a common error in the drug-trade to suppose that the fact of a thing being in the Pharmacopæia makes it superior to spirit law.

106/66. J. A.—We should think that the Chesebrough Company would not object to your using the title "Vaseline Pomade," if you can show that you use vaseline in making it. You must bear in mind that "Vaseline" is their trade-mark. How they will regard the last line on the label "Unsurpassed by any other make," you can imagine as well as we can.

107/67. J. C. puts the following case:—A lease was granted on a shop for twenty-one years to A.B., who remained about four years, during which time the property was sold to another party. A. B. sold his business to C. D., who remained some four years, during which time the owner of the property died, and it was sold to another firm. C.D. sold the business to E. F. some six months ago, and now the present owners refuse to acknowledge E. F. as tenant, beyond accepting the rent from him and giving a receipt in C. D.'s name, but holding C. D. responsible in the event of E. F. not paying. There is a clause in the lease saying consent must be given to transfer lease, provided a suitable tenant is found. E. F. is quite willing to forward them references if they require it, but why should C. D. be held responsible, when he is not the original holder of the lease?

Our correspondent has made his query unnecessarily complicated by referring to the transfers of the reversion, which do not affect the position of the lessee in any way. The law of landlord and tenant is quite clear—that the original lessee is liable for the rent and covenants throughout the whole term, but the assignee is only liable as long as his estate lasts, and no longer. The simple question, therefore, is. Has there been any valid assignment from C. D. to E. F.? If there has, C. D. is relieved from all responsibility to the landlords. If there has not, C. D. is still liable. As far as we can gather, no application was made for the landlords' licence to assign before the assignment took place, and the landlords, therefore, refuse to recognise the assignment. Where there is no power to assign without licence, the question of acceptance of the assignee by the landlord is a question of fact, but we should hardly think that in this case the landlords could be said to have recognised E. F., so that C. D. remains liable. The matter was very fully discussed by the House of Lords in the case Lord Elphinstone v. Monkland Iron Company (11 Appeal Cases, 332). In Burrows v. Isaacs & Son, decided in 1891, the Court of Appeal held that the non-application for the licence to assign, although it could not be unreasonably withheld from a responsible tenant, was a breach of covenant, and entitled the landlord to forfeit the lease. This right of forfeiture, however, cannot be exercised in this case, as the landlords appear to have received rent with knowledge of the assignment, which is a waiver of the right of forfeiture.

108/2. Dos writes:—" My seltzogene was sent to a firm to be repaired. While in the firm's hands, and in the process of being tested, it suddenly collapsed. Who is legally responsible for the breakage—the firm or myself?" [This case is that of a bailee to whom goods are delivered to be repaired and this law is called "locatio operis faciendi." Such a ballee is only required to use ordinary care. He is not responsible for robbery or accident which happens without his fault. If our correspondent can prove negligence on the part of the firm to whom he sent his seltzogene for repair then he will be able to recover. If not, he will have the pleasure of paying the defendant's costs.]

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulæ, educational or other specific information can be obtained from the Publisher.

102/7. W. E.-The best plan for the Administration of Male Fern for Tapeworm is for the patient to eat as little food as possible for twenty-four hours, and two hours after a eup of tea and slice of dry toast give the dose of male-fern extract. The patient should then go to bed, and at six next morning the following draught should be given :-

> Ol. ricini 5i. Aq. ad 3ij.

This produces a brisk purge, and, if the extract of male fern is good, nearly all the worm comes away. If the head remains in the bowel, repeat the treatment four days afterwards.

102/56. Sedox.- Chestnut Hair-dye.-Our correspondent wants a solution which will suit the following label: -

THE IMPROVED CHESTNUT HARR-DVE.—Carefully prepared from a physician's receipt. Does not stain the skin. Absolutely harmless.

This colourless and odourless preparation gives to grey and white hair a

deep chestnut colour; is absolutely harmless, and does not stain the skin.

Directions .- Wash and thoroughly rinse the hair; when dry, apply the dye with a sponge. This should be repeated daily.

This evidently does not require a silver solution. In these circumstances we should give :-

> Pyrogallie acid .. · 5j. Nitrie achl.. .. •• • • .. III. Water to 3iv. Mix and dissolve.

This will keep clear for a long time.

101/49. H. S. L.—The preparation is one made by McKesson & Robbins. Try Maw, their agents, for it.

5/23. Berks.—You will find all that you want to know regarding round worms in the DIARY, page 330.

100/55. Dens.—See our issue of June 3, page 775, for Weed-killer formula.

99/16. Norfolk Howard.—For Exterminating Bugs there is nothing better than a mercurial preparation. An effectual one is a solution of strong mercurial ointment, 2 oz. in 1 pint of turpentine. This is more effectual than the solution of corrosive sublimate, because aqueous solutions do not penetrate the "skin" of the insects. Turpentine is itself obnoxious to them, and dissolves the waxy substance on the bugs, so that the mercurial acts expeditiously. The preparation should be inserted into cracks, where the bugs "most do congregate," with a feather.

92/41. Extract. - Noble-metal Testing. - Nitrate-ofsilver solution leaves no stain on pure silver; on base metals it does. Gold is not attacked by nitric acid; all similarcoloured metals are. First scratch a bit of the surface (the back of the article preferably), so as to remove gilding or plating; then apply a dot of the acid to the scratched

Sol

100/34. L.—(1) Cod-liver Oil and Malt Emulsion.—The following gives a satisfactory preparation:—

Powdered acacia				 Fj.
., tragacar	ıtlı			 3j.
Saccharated solnti-	on of lin	ac		 3iss.
Glycerine				 3iv.
Malt extract				 Oi.
Cod-liver oil				
Essence of vanilla				
" bitter a	Imonds	(1 in 2	0)	 mxx.
Oil of cloves				 *
CD 1 C				

Mix the gams and the glycerine in a large mortar, and add about 4 oz. of the malt extract. Add all the flavouring ingredients to the oil, also the lime-solution. Shake, and add it to the mortar-contents a few ounces at a time, alternately with malt extract, until the emulsion is complete.

Great care should be exercised to avoid the addition of too much oil at any one time, as any surplus is exceedingly difficult to rubin. (2) "What are the best means for disinfecting the person while attending infectious cases, and the rooms and clothing after such cases?" This is rather a comprehensive question. If proper means of disinfection are used in the sick-room, there is little chance of the medical attendant carrying away infection with him, especially as careful men make it a point of removing their coat before entering the room, or changing it before visiting other patients. Nurses also remove the upper garment. The only sure way of completely sterilising garments is to submit them to a dry heat of about 230° F. Most large towns are now supplied with disinfecting or sterilising chambers for blankets, &c. Bed-linen should be steeped in L.G.B. disinfectant (corrosive-sublimate solution) before washing, and all dejecta should be mixed immediately with a disinfectant. After the illness, the room should be entirely cleared of furniture, &c., and a sulphur candle or two burnt in it with closed doors and windows. After a day, the apartment should be thoroughly cleaned out.

92/18. Lux.—Browning, the optician (Strand, W.C.), publishes a shilling book on the spectroscope, and you will find particulars about the instrument in Ganot's "Physics" and similar text-books.

92/58. Charta.—Medical Fumigating-papers are generally cut into pieces 5 inches square.

103/74. Impy.—The sample of Infants' Preservative you send we have a strong impression does contain powdered rhubarb, but it is not essential in such a product, a good carminative and antispasmodic mixture being what is needed. Try the following, which gives a mixture very near in appearance and equal in effect to your sample:—

Magnes, carb. le	v	 	 	Zj.
Ol. anisi		 	 	max.
Ammon. carb.	• •	 	 	3j.
Syr. crcci		 	 	Зij.
Tr. lavand. co.		 	 	Ziij.
Syr. papaver.		 	 	3is€.
· An cormina				300

Dose: From 10 drops to a teaspoonful, according to age.

96,84. N. L.—Your two letters to hand: in the one you name the samples Citrate of Ammonia, in the other Tartrate of Ammonia. On a rough examination, each seems to be a tartrate. If you made the same slip on ordering as you do in your letter it is quite possible you may have been charged 2s. 6d. per lb. in 1-cwt. quantities, whilst your customer was able to buy a similar article at 1s. 3d. per lb. Anyhow, both articles seem very much alike. This you may verify for yourself by adding a small quantity of each, in solution, to separate quantities of good lime-water. Tartrates give a precipitate in alkaline, and neutral solutions in the cold. Citrates precipitate on boiling. Sulphate of Potash in Baking-powders in place of alum.—See issue July 1, 1893, page 32. Note also answer in same issue to E. Marshall under Legal Queries.

101/33. Progress.—Foot-rot Lotion, when made according to formula published on January 21. 1893, page 96, by our correspondent, "bubbled, boiled, and effervesced, after an hour or so," even out of a gallon bottle. He wishes an explanation, and to know if such a preparation "is safe." This result is inexplicable to us. We have made several lots of the lotion according to the formula published, and found each sample satisfactory in appearance, and no bother in preparing. Did "Progress" find his butyr of antimony in accordance with the B.P. tests? If on another trial the formula does not give a satisfactory product, then substitute sulphuric acid for nitric acid, when any possible cause of the evolution of any gas will most likely be avoided. Other correspondents who have tried the formula, which was based on an analysis by a subscriber, might send us their results. It is:—

Cupri sulph.			 	 5j.
Zinci sulph.		• •,	 	 3j.
Acid. nitrie.			 	 Ξj.
Glycerini	• •		 	 Siij.
Aquam ad		• •	 • •	 3 j.
ve sec. art., et ac	lde-			
Liq. antim. c	hlori	di	 	 Iss.

"Progress's" sample smells of carbolic acid. Why, we do not know, but it may explain his results.

INFORMATION SUPPLIED.

Red Billiard-ball.—The instructions given on page 350 only apply to a new ball, not to one that has been used and colour worn off. I had recently to colour three red billiard and two pool balls blue and green. I had never done a similar thing, so tried as your information states—acid-bath, wash, boil, and polish. All balls after a time of using get small crescent-shaped cracks at grain-end of the ivory, and, when boiled, these curl like a small scale and turn outward, making the ball quite rough on each side, which necessitates rubbing down and so spoiling the colour again. I then tried using a 4-oz. cup-bottom measure for bath, covered with benzine for a few minutes, then dilute acid, and then equalparts of water and Judson's cardinal, Oxford blue, and dark green for respective colour balls; had a capital result and smooth surface to polish with oil. The acid-bath is solunitromuriate of tin—30 drops to 3 oz. aqua.

QUÆRENS. (14/37.)

Pipe-repairing.—I have used solution of white shellacs for pipe-repairs with good results; smooth surface of broken amber must be scratched.

QUERENS. (14/37.)

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, post-cara replies to the following:—

108/40. Makers of "Capitine."

C. B. The name and address of present makers of Garland's Saponaceous Liquid Dentifrice.

Business Changes.

Mr. W. REES WILLIAMS is opening a new chemist's shop at Tylor's Town.

Mr. Herbert Woodcock has started in George Street, Croydon, a pharmacy on the Stores system.

Mr. H. R. BECKETT has bought the business hithertocarried on at 4 Priory Terrace, Tonbridge, by Mr. Hearn.

MESSRS. PARKE, DAVIS & Co. have removed to new premises at 21 North Audley Street (451 Oxford Street), W.

Mr. A. G. Doble, son of Mr. H. T. Doble, M.P.S., Tavistock, has purchased the old-established business of Messrs. Morris & Co., Wimborne.

MESSRS. E. MARRIOTT & Co., of Hastings, the patentees and manufacturers of the "Lily" baby-comforters, have purchased the Leamington Homocopathic Pharmacy, which has been carried on for many years past under the name of Messrs. Leath & Woolcott, at 49 The Parade, Leamington.